Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	1	1012

ACIM-0803(237)E

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN YOLO AND SACRAMENTO COUNTIES
IN AND NEAR WEST SACRAMENTO AND SACRAMENTO
FROM ROUTE 80/84 SEPARATION
TO WATT AVENUE OVERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

INDEX OF PLANS

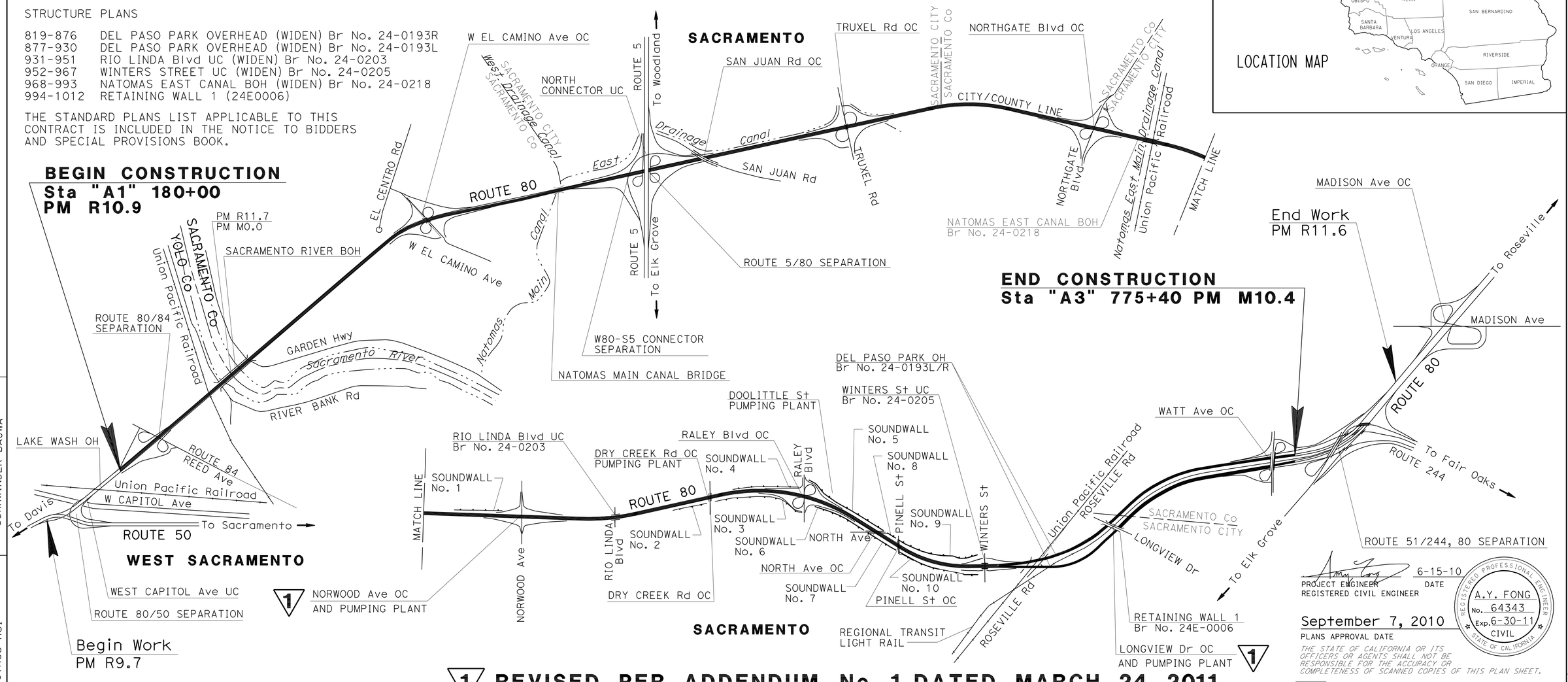
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-10	TYPICAL CROSS SECTIONS
11	KEY MAP AND LINE INDEX
12-47	LAYOUTS
48-86	PROFILES AND SUPERELEVATION DIAGRAM
87-125	CONSTRUCTION DETAILS
126-134	EROSION CONTROL PLAN
135	CONTOUR GRADING
136-234	DRAINAGE PLANS, PROFILES, DETAILS AND QUANTITIES
235-236	CONSTRUCTION AREA SIGNS
237	MOTORIST INFORMATION PLANS
238-405	STAGE CONSTRUCTION PLANS AND TRAFFIC HANDLING PLANS, DETAILS AND QUANTITIES
406-442	DETOUR PLANS
443-491	PAVEMENT DELINEATION AND SIGN PLANS, DETAILS AND QUANTITIES
492-568	SIGN DETAILS AND QUANTITIES
569-578	SUMMARY OF QUANTITIES
579-669	SOUND WALL PLANS, DETAILS AND QUANTITIES
670-693	PLANTING PLANS AND IRRIGATION PLANS
694-739	ELECTRICAL PLANS
740-818	REVISED AND NEW STANDARD PLANS

STRUCTURE PLANS

819-876	DEL PASO PARK OVERHEAD (WIDEN) Br No. 24-0193R
877-930	DEL PASO PARK OVERHEAD (WIDEN) Br No. 24-0193L
931-951	RIO LINDA Blvd UC (WIDEN) Br No. 24-0203
952-967	WINTERS STREET UC (WIDEN) Br No. 24-0205
968-993	NATOMAS EAST CANAL BOH (WIDEN) Br No. 24-0218
994-1012	RETAINING WALL 1 (24E0006)

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

LOCATION MAP



1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

NO SCALE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

PROJECT ENGINEER
REGISTERED CIVIL ENGINEER — 6-15-10 DATE

September 7, 2010
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A.Y. FONG No. 64343 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

PROJECT MANAGER: SUKHWINDER BAJWA
DESIGN ENGINEER: CYRUS HUI

LAST REVISION 00-00-00 | DATE PLOTTED => 23-MAR-2011 | TIME PLOTTED => 11:23

CONTRACT No.	03-3797U4
0300020155 PROJECT ID	~~0300000434~~

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol, Sac	80	R10.9/R11.7, M0.0/M10.4	12	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A. Y. FONG No. 64343 Exp 6-30-11 CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. EDGE OF CONCRETE IS LOCATED AT EXISTING EDGE OF TRAVELED WAY PER AS-BUILTS. CTB IS LOCATED AT EXISTING EDGE OF TRAVELED WAY PER AS-BUILTS.
3. FOR LOCATION OF EXISTING DTBB AND TBB, VERIFY IN FIELD.
4. LOCATIONS OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
5. FOR ADDITIONAL FENCE REMOVAL AND CONSTRUCTION AT SOUND WALL LOCATIONS, SEE SOUND WALL PLANS.
6. FOR LIMITS OF RHMA-O OVERLAY AND COLD PLANE AC PAVEMENT, SEE TYPICAL CROSS SECTION.
7. ALIGNMENTS SHOWN ARE BASED ON A FIELD SURVEY "BEST FIT" RETRACEMENT OF THE AS-BUILT ALIGNMENTS.
8. THE ENGINEER WILL DETERMINE CONTINUOUS OR INDIVIDUAL SLABS TO BE REPLACED.
9. UTILITY OWNERSHIP ON THIS PROJECT:

GAS	- PACIFIC GAS & ELECTRIC (PG&E)
ELECTRIC	- SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD)
	- PG&E
SANITARY SEWER	- SACRAMENTO COUNTY
WATER	- CITY OF SACRAMENTO
FIBER OPTIC CABLE	- NEXLINK COMMUNICATION INC
	- ELECTRIC LIGHT WAVE
	- PHOENIX FIBERLINK INC
	- BROOKS FIBER COMMUNICATIONS
	- WESTERN INTEGRATED NETWORKS
	- SUREWEST
CABLE TELEVISION	- COMCAST
OIL	- KINDER MORGAN
TELEPHONE	- AT&T

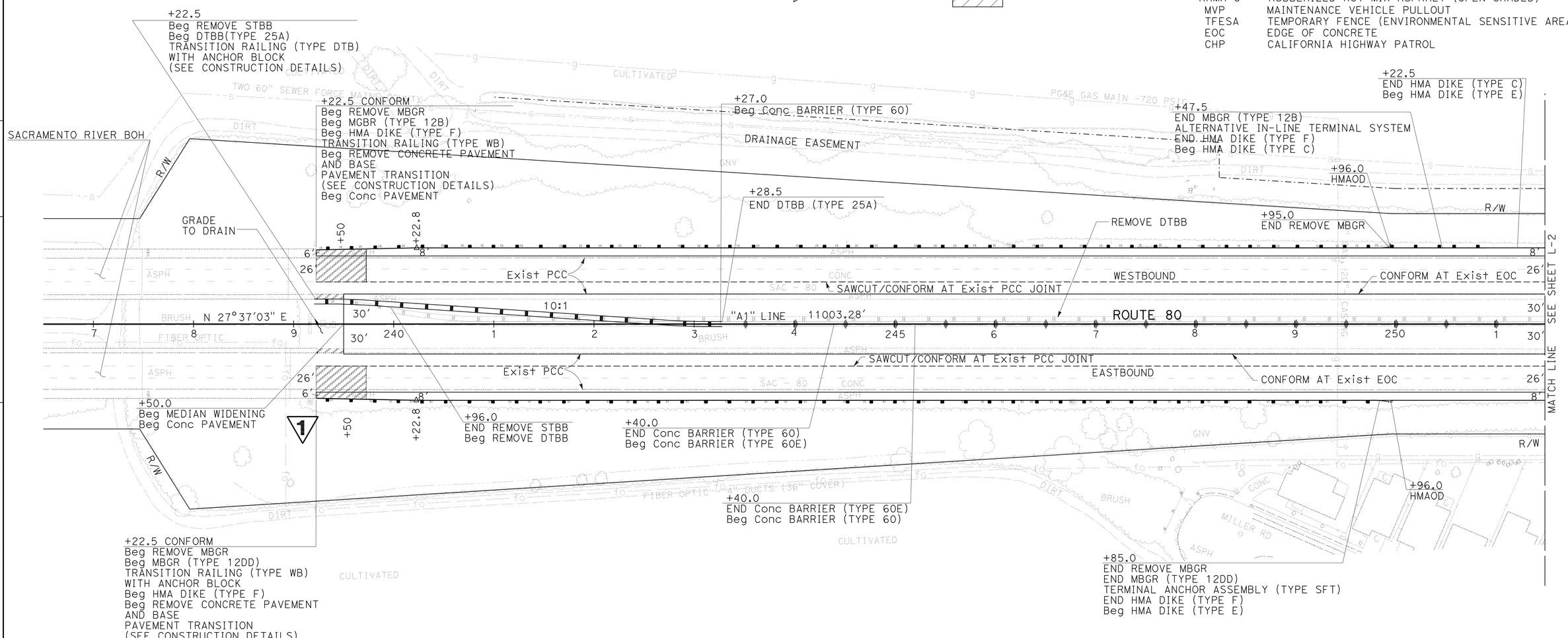
10. DEPTH OF POTHOLE DATA IS FROM OG TO TOP OF UTILITY.

LEGEND

- ANGLE POINT
- (No.) CURVE NUMBER
- SAWCUT/CONFORM
- DRAINAGE EASEMENT
- 0.1′ RHMA-O OVERLAY
- TRANSITION CONFORM RHMA-O OVERLAY TAPER
- PAVEMENT TRANSITION (SEE CONSTRUCTION DETAILS PLAN)
- COLD PLANE AC PAVEMENT (0.10′ Max)
- COLD PLANE AC PAVEMENT (0.25′ Max)

ABBREVIATIONS

HMAOD	HOT MIX ASPHALT OVERSIDE DRAIN
TCE	TEMPORARY CONSTRUCTION EASEMENT
G	GAS
E	ELECTRIC
S	SANITARY SEWER
W	WATER
FO	FIBER OPTIC
TV	CABLE TELEVISION
T	TELEPHONE
TC	TELEMETER CABLE (FIBER OPTIC)
UG	UNDERGROUND
ESA	ENVIRONMENTALLY SENSITIVE AREA
RHMA-O	RUBBERIZED HOT MIX ASPHALT (OPEN GRADED)
MVP	MAINTENANCE VEHICLE PULLOUT
TFESA	TEMPORARY FENCE (ENVIRONMENTAL SENSITIVE AREA)
EOC	EDGE OF CONCRETE
CHP	CALIFORNIA HIGHWAY PATROL



1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

LAYOUT

SCALE: 1" = 50′ **L-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

FUNCTIONAL SUPERVISOR: CYRUS HUI
CALCULATED-DESIGNED BY: A. RANDHAWA
CHECKED BY: A. FONG
REVISED BY
DATE REVISED

LAST REVISION 00-00-00 | DATE PLOTTED => 23-MAR-2011 | TIME PLOTTED => 11:23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	44	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A. Y. FONG No. 64343 Exp 6-30-11 CIVIL STATE OF CALIFORNIA

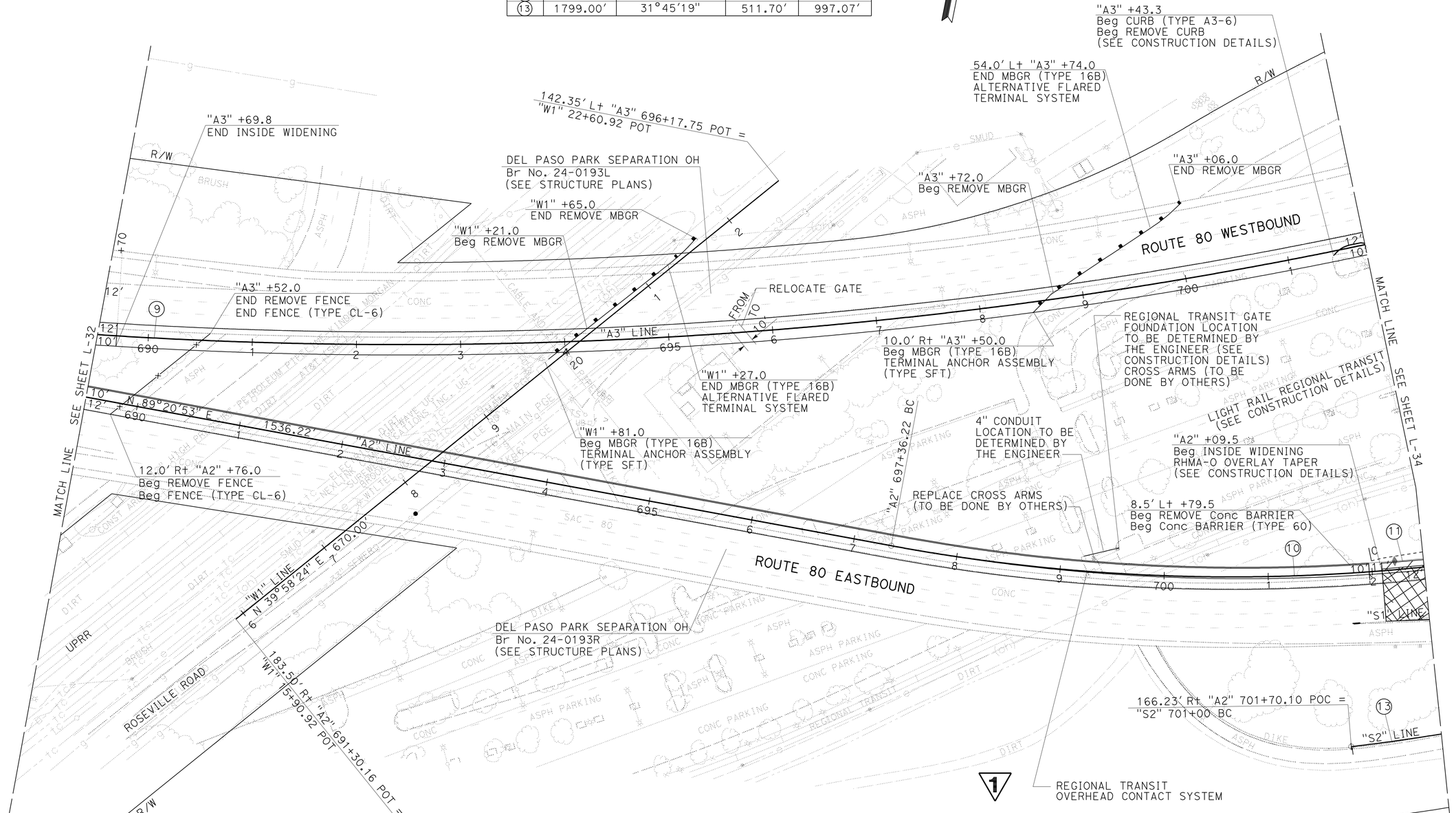
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

CURVE DATA

No.	R	Δ	T	L
9	4500.00′	42°10′17″	1735.11′	3312.13′
10	1800.00′	42°50′04″	706.03′	1345.68′
11	1809.00′	27°57′08″	450.24′	882.54′
13	1799.00′	31°45′19″	511.70′	997.07′



1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

LAYOUT

SCALE: 1" = 50′

L-33

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

FUNCTIONAL SUPERVISOR: CYRUS HUI

CALCULATED-DESIGNED BY: A. RANDHAWA
CHECKED BY: A. FONG
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 23-MAR-2011
TIME PLOTTED => 11:23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	129	1012

LICENSED LANDSCAPE ARCHITECT

9-7-10
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
T. CHRIS JOHNSON
No. 5102
Signature
8-31-10
Renewal Date
6-15-10
Date
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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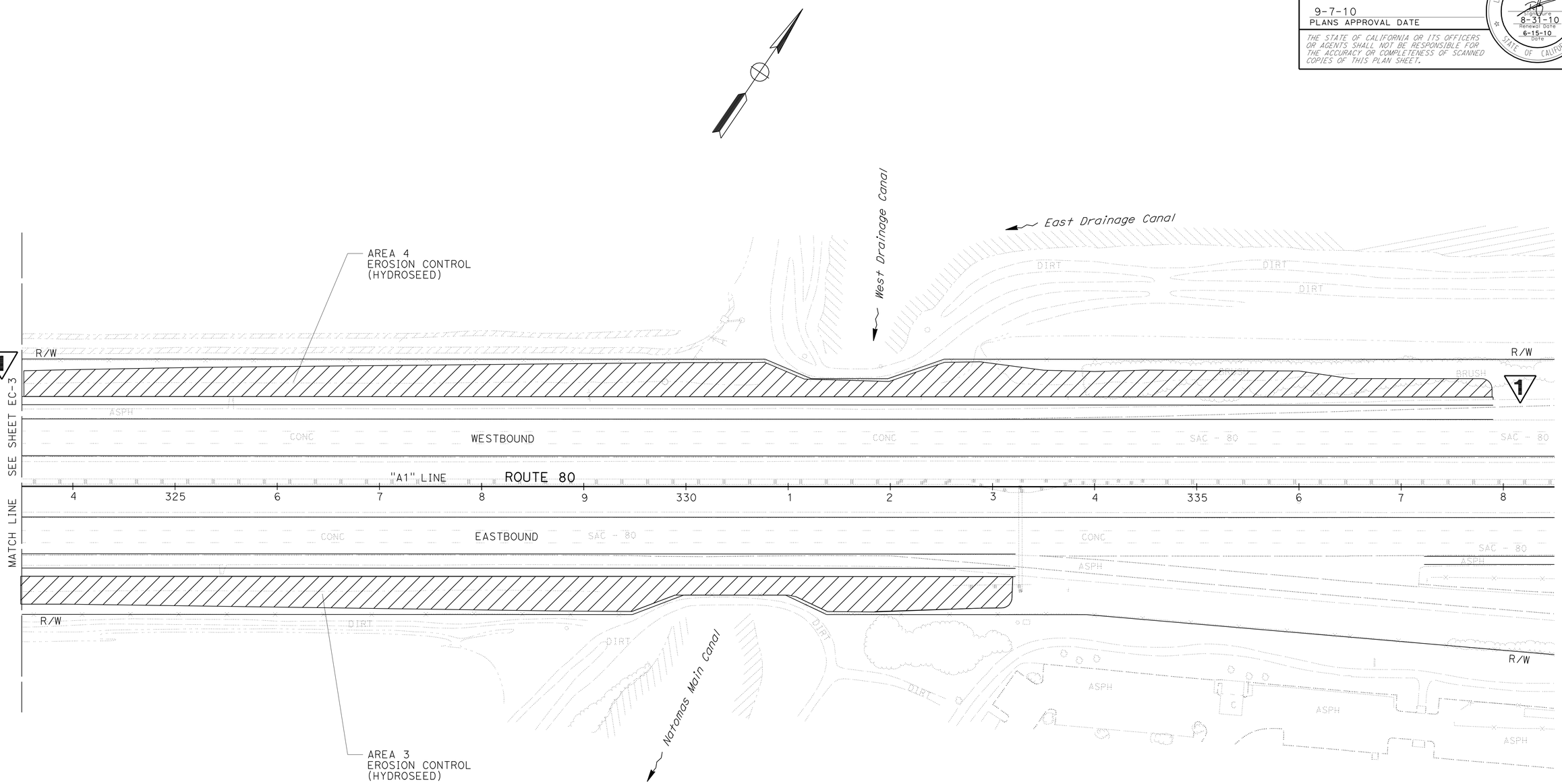


1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**

THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY.

EROSION CONTROL PLAN

SCALE: 1" = 50'

EC-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

SENIOR LANDSCAPE ARCHITECT
KENNETH MURRAY

CALCULATED-DESIGNED BY
T. CHRIS JOHNSON

CHECKED BY

REVISED BY

DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 23-MAR-2011
TIME PLOTTED => 11:23

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	129A	1012

LICENSED LANDSCAPE ARCHITECT

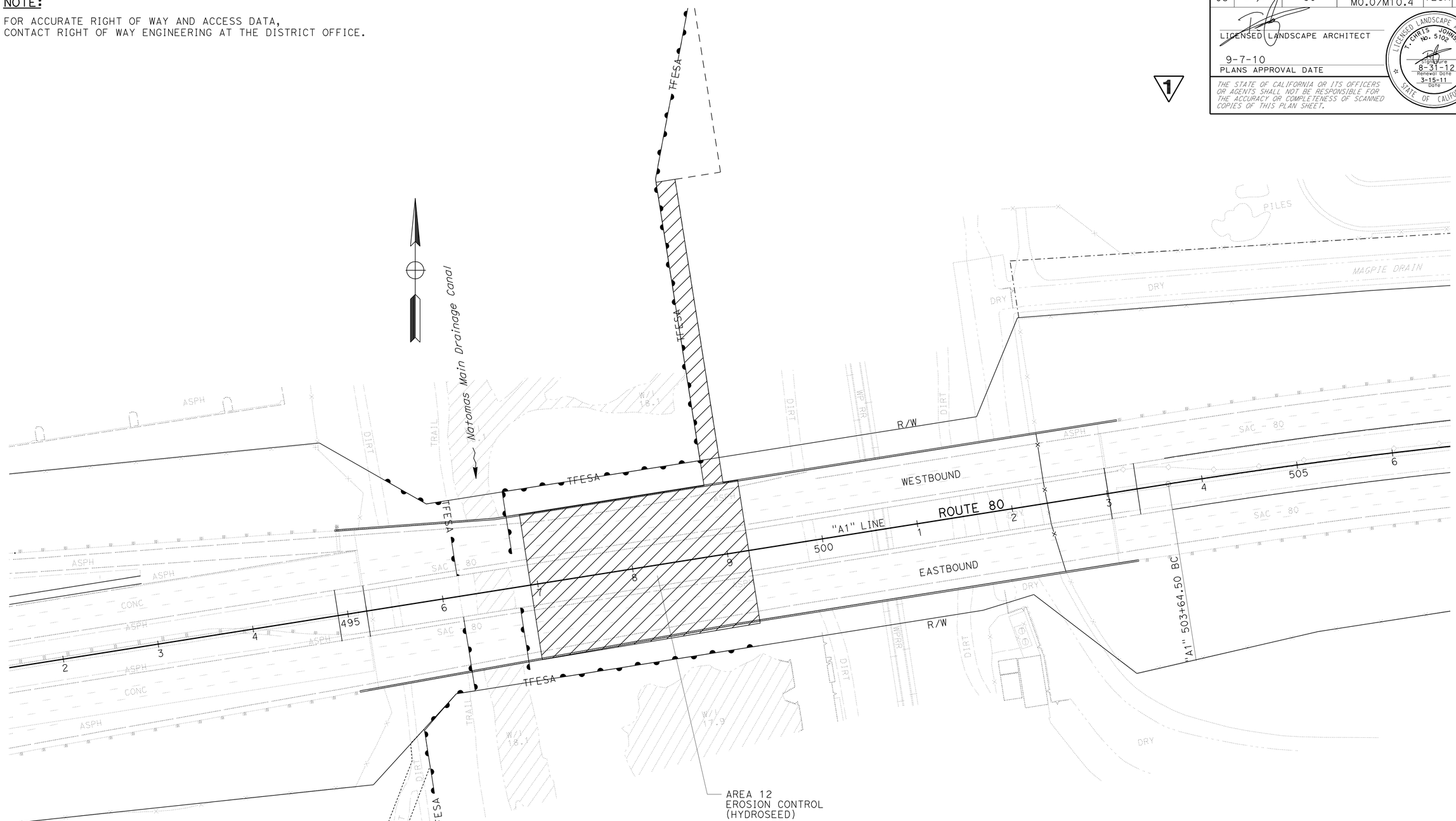
9-7-10
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
T. CHRIS JOHNSON
No. 5102
Signature
8-31-12
Renewal Date
3-15-11
Date
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY AND ACCESS DATA,
CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



1 ADDED PER ADDENDUM No. 1 DATED MARCH 24, 2011

THIS PLAN ACCURATE FOR EROSION CONTROL WORK ONLY.

EROSION CONTROL PLAN

SCALE: 1"=50'

EC-4A

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

SENIOR LANDSCAPE ARCHITECT: KENNETH MURRAY

CALCULATED-DESIGNED BY: T. CHRIS JOHNSON

CHECKED BY

REVISED BY

DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 23-MAR-2011
TIME PLOTTED => 11:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	238	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A.Y. FONG No. 64343 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND AND ABBREVIATIONS

- MEDIAN WIDENING CONSTRUCTION THIS STAGE
- (No.) CONSTRUCTION ITEM THIS STAGE
- DIRECTION OF TRAVEL ARROW
- CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) THIS STAGE
- TEMPORARY RAILING (TYPE K)
- (No. / X) TRAFFIC STRIPING DETAIL X = P (PAINT), M (MARKER) OR T (TAPE)
- CHANGE OF PAVEMENT DELINEATION DETAILS
- [No.] ROADSIDE SIGN/CONSTRUCTION AREA SIGN NUMBER
- (A) ADDITIONAL STATIONARY MOUNTED CONSTRUCTION AREA SIGN
- CONCRETE PAVEMENT CONSTRUCTION THIS STAGE
- OUTSIDE WIDENING THIS STAGE
- RAMP CONSTRUCTION THIS STAGE
- CONCRETE PAVEMENT CONSTRUCTION WITH RAMP CLOSURE THIS STAGE
- SHOULDER RECONSTRUCTION
- END TRAFFIC STRIPE PATTERN OR REMOVAL LIMIT
- CHANNELIZER (SURFACE MOUNTED)
- REMOVE ROADSIDE SIGN (SEE SIGN PLAN)
- RELOCATE ROADSIDE SIGN
- LL LANE LINE
- TRAFFIC PLASTIC DRUM
- PCMS
- RESET ROADSIDE SIGN (SEE SIGN PLAN)
- ROADSIDE SIGN (BARRIER MOUNTED) (SEE SIGN PLAN)
- TYPE VI ARROW
- COVER ROADSIDE SIGN
- REMOVE ROADSIDE SIGN (SEE SIGN PLAN)

NOTES:

1. INDEX NOTES DO NOT REPRESENT AN ORDER OF WORK AS INDICATED.
2. OGRHMA LIFT, GROOVING, GRINDING AND FINAL STRIPING IS THE FINAL ORDER OF WORK.
3. WORK NOT NECESSARY FOR STAGING OPERATION CAN BE DONE AT ANY STAGE AND IS NOT SHOWN.
4. LOCATION OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
5. FOR EXISTING SIGNS NOT SHOWN FOR REMOVAL, REMAIN, OR RELOCATION, SEE SIGN PLANS.
6. FOR LANE CLOSURES, SEE "TRAFFIC CONTROL" IN THE SPECIAL PROVISIONS.
7. PLACE TEMPORARY TRAFFIC SCREENS ON ALL TEMPORARY RAILING (TYPE K).
8. ALL SIGN CODES SHOWN ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
9. CONSTRUCTION AREA SIGNS SHOWN ARE FOR STAGE CONSTRUCTION AND ARE IN ADDITION TO THOSE SHOWN ON SHEET CS-1.
10. REFER TO DRAINAGE PLANS FOR DRAINAGE WORK.
11. REFER TO SUMMARY OF QUANTITIES FOR LIMITS OF CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE).
12. EXACT LOCATION OF TEMPORARY RAILING(TYPE K) OPENING TO BE DETERMINED BY THE ENGINEER.
13. REFER TO PHASE ~~3~~ 2 AND 3 CROSSOVER LOCATIONS AND DETOUR FOR MEDIAN CONCRETE BARRIER AND DTBB OPENINGS.

1

1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**

THIS PLAN ACCURATE FOR STAGE CONSTRUCTION WORK ONLY.

STAGE CONSTRUCTION PLAN
(LEGEND AND NOTES)
NO SCALE

SC-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

FUNCTIONAL SUPERVISOR: CYRUS HUI
CALCULATED-DESIGNED BY: A. FONG
CHECKED BY: M. SCHMUCKI
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 23-MAR-2011
TIME PLOTTED => 11:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	276	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A. Y. FONG No. 64343 Exp 6-30-11 CIVIL STATE OF CALIFORNIA

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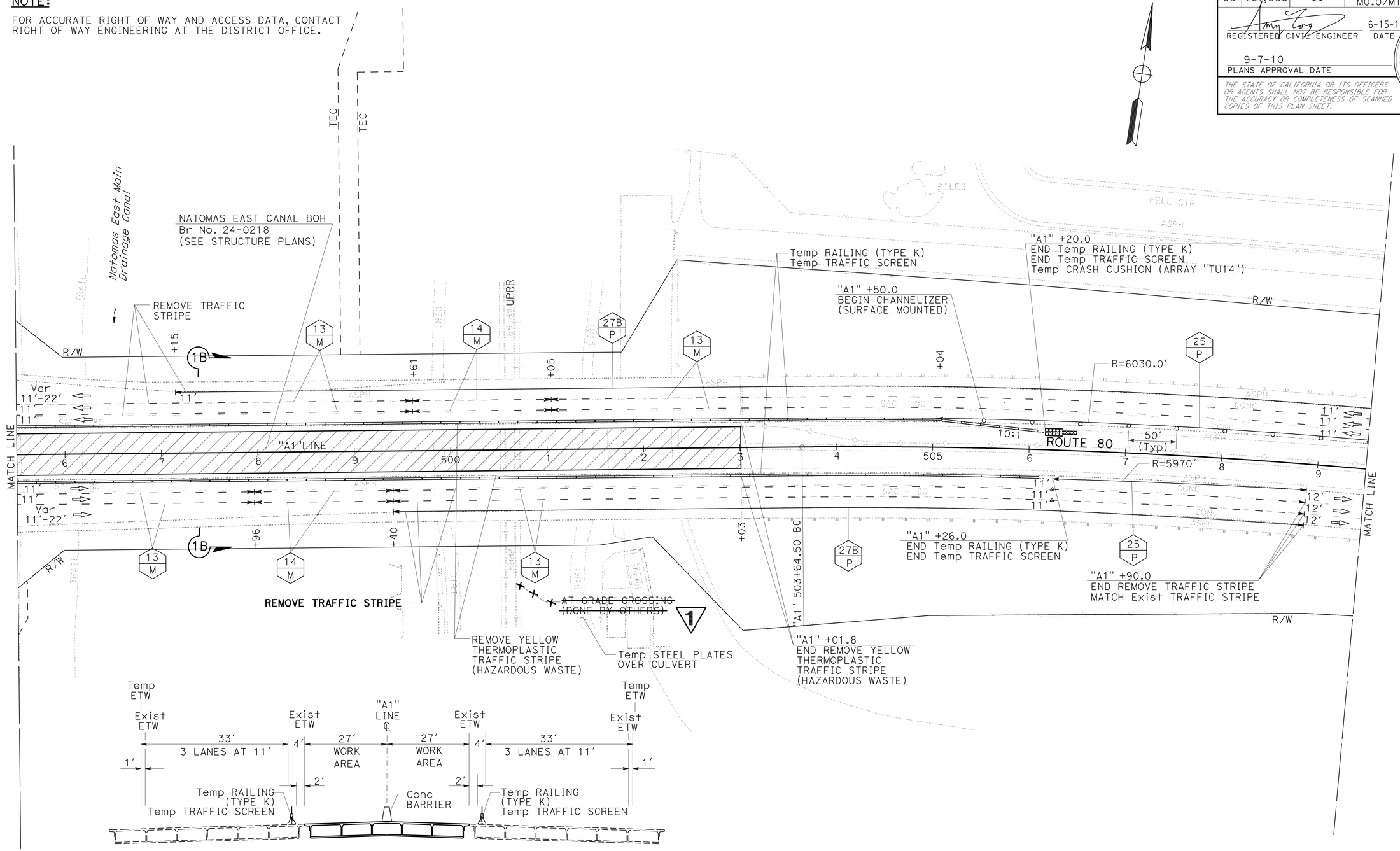
NOTE:

FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



SECTION 1B-1B
NO SCALE
"A1" 495+18 TO 503+01.8

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN

PHASE 1 STAGE 1A

SCALE: 1" = 50'

SC-39

THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

FUNCTIONAL SUPERVISOR: CYRUS HUI
CALCULATED-DESIGNED BY: A. FONG
CHECKED BY: D. MINHAS
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 23-MAR-2011
TIME PLOTTED => 11:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	288	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A. Y. FONG No. 64343 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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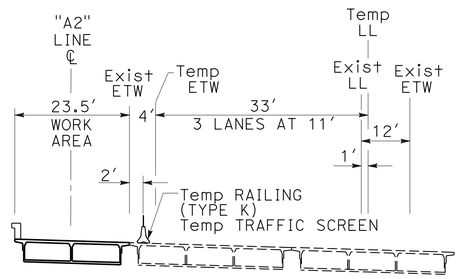
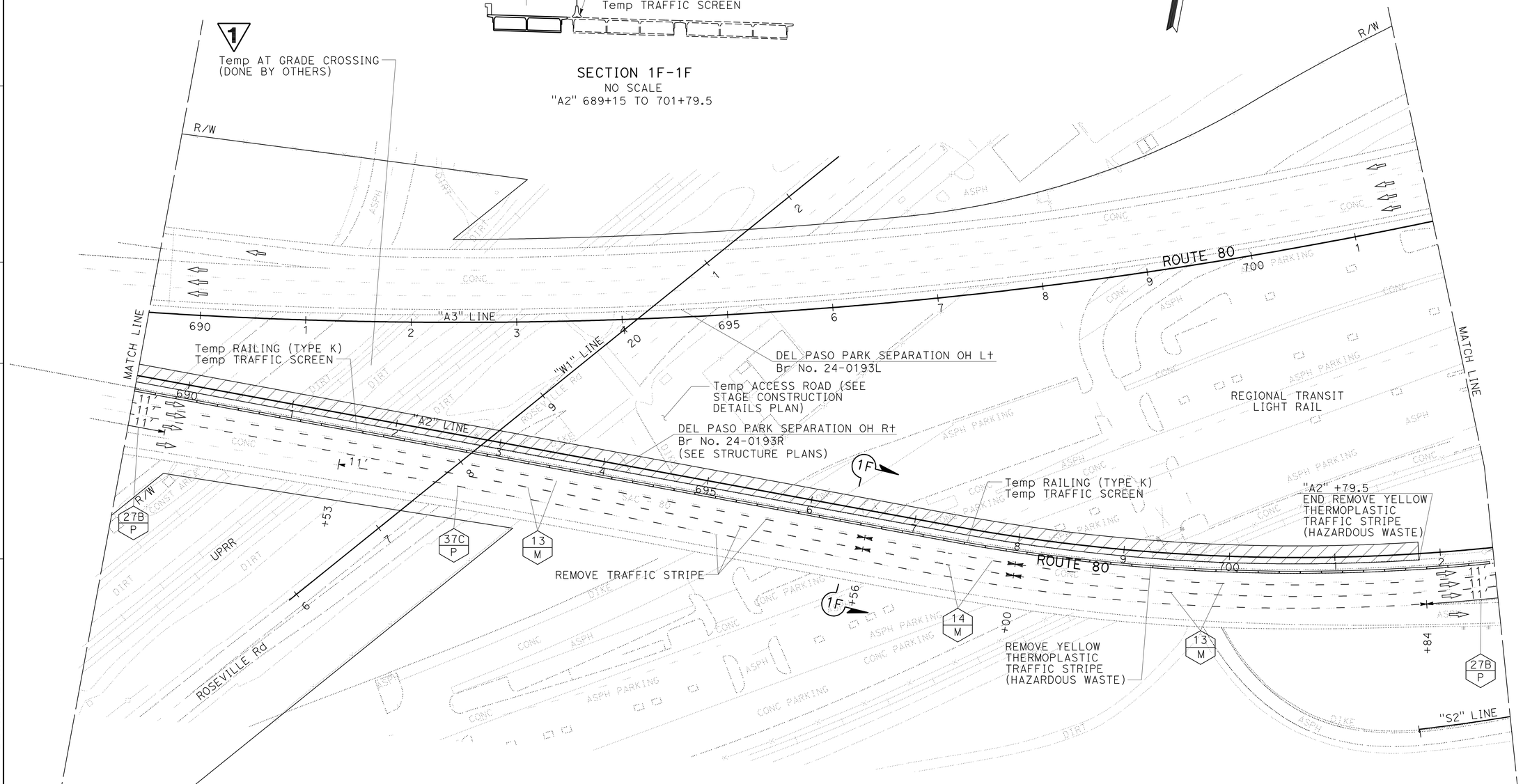


SECTION 1F-1F
NO SCALE
"A2" 689+15 TO 701+79.5



1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**
THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN

PHASE 1 STAGE 1E
SCALE: 1" = 50′

SC-51

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

FUNCTIONAL SUPERVISOR: CYRUS HUI
CALCULATED-DESIGNED BY: A. FONG
CHECKED BY: D. MINHAS
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 23-MAR-2011
TIME PLOTTED => 11:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	291	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A. Y. FONG No. 64343 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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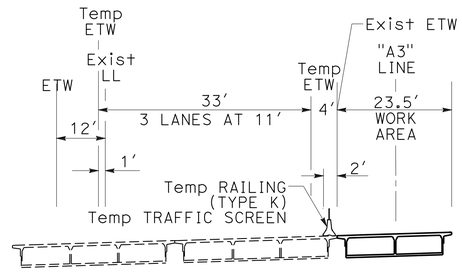
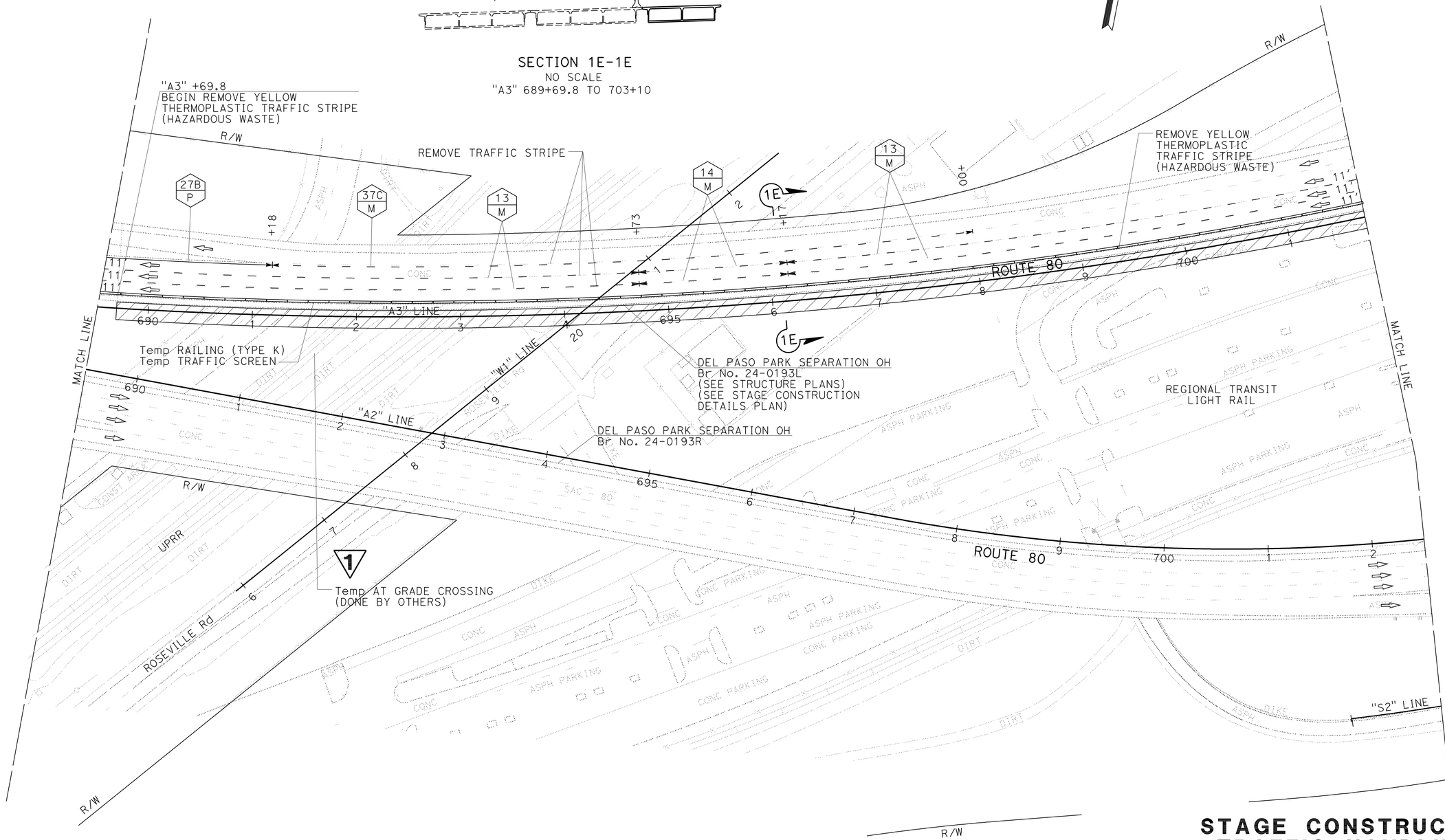


SECTION 1E-1E
NO SCALE
"A3" 689+69.8 TO 703+10



1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**
THIS PLAN ACCURATE FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY.

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN

PHASE 1 STAGE 1F
SCALE: 1" = 50'

SC-54

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

FUNCTIONAL SUPERVISOR: CYRUS HUI
CALCULATED-DESIGNED BY: A. FONG
CHECKED BY: D. MINHAS
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 23-MAR-2011
TIME PLOTTED => 11:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	573	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A. Y. FONG No. 64343 Exp 6-30-11 CIVIL STATE OF CALIFORNIA

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RUBBERIZED HMA (OPEN GRADED)

STATION LIMITS	RUBBERIZED HMA (OPEN GRADED)
	TON
"A1" 479+45.0 TO "A1" 494+89.8 R†	854
"A1" 483+12.0 TO "A1" 494+89.8 L†	606
"A1" 503+31.8 TO "A1" 547+85.0 R†	2,179
"A1" 503+31.8 TO "A1" 550+12.0 L†	2,355
"A2" 702+09.5 TO "A2" 738+41.2	1,041
"A3" 703+40.0 TO "A3" 713+12.0	203
TOTAL	7,238

COLD PLANE ASPHALT CONCRETE PAVEMENT

STATION LIMITS	COLD PLANE ASPHALT CONCRETE PAVEMENT	
	0.1′ Max	0.25′ Max
	SQYD	SQYD
"A2" 703+86.0 TO "A2" 728+41.2	15,519	
"A3" 707+82.0 TO "A3" 728+87.5	12,565	
"B2" 298+00.0 TO "B2" 298+50.0		130
"S3" 720+25.0 TO "S3" 720+50.0		142
SUBTOTAL	28,084	272
TOTAL	28,356	

HMA TEXTURED PAVING

LOCATION	HMA TEXTURED PAVING
	SQYD
WEST EL CAMINO Ave EB ON RAMP	74
TOTAL	74

REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) 1

STATION LIMITS	LOCATION	CY	DOWEL BAR
			EA
"A1" 239+22.5 TO "A1" 483+12.0	L†	7,600	216
"A1" 550+12.0 TO "A2" 689+40.0	L†		
"A1" 239+27.5 TO "A1" 479+00.0	R†		
"A1" 547+85.0 TO "A3" 688+54.5	R†		
TOTAL		7,600	216

METAL BEAM GUARD RAILING (WOOD POST) & VEGETATION CONTROL

STATION & LOCATION	(N) FLARE TYPE	METAL BEAM GUARD RAILING (WOOD POST)	TERMINAL ANCHOR ASSEMBLY (TYPE SFT)	(N) BURIED POST ANCHOR	ALTERNATIVE FLARED TERMINAL SYSTEM	ALTERNATIVE IN LINE TERMINAL SYSTEM	TRANSITION RAILING (TYPE WB)	TRANSITION RAILING (TYPE DTB)	VEGETATION CONTROL (MIINOR CONCRETE)
	TYPE	LF	EA	EA	EA	EA	EA	EA	SQYD
"A1" 239+22.5 L† TO "A1" 250+47.5 L†	12B	1,125.0				1		1	488.0
"A1" 239+22.5 R† TO "A1" 249+85.0 R†	12DD	1,062.5	1						441.9
"A1" 304+38.5 L† TO "A1" 304+76.0 L†	16A	37.5	1			1			35.7
"A1" 308+41.5 R† TO "A1" 308+79.0 R†	16A	37.5	1			1			35.7
"A1" 335+88.5 L† TO "A1" 336+26.0 L†	16B	37.5	1			1			35.7
"A1" 333+08.5 R† TO "A1" 333+46.0 R†	16A	37.5	1			1			35.7
"A1" 375+34.0 L† TO "A1" 375+71.5 L†	16A	37.5	1			1			35.7
"A1" 392+87.5 L† TO "A1" 393+25.0 L†	16B	37.5	1		1				48.8
"A1" 395+19.0 R† TO "A1" 395+56.5 R†	16B	37.5	1		1				48.8
"A1" 429+38.5 L† TO "A1" 429+76.0 L†	16B	37.5	1		1				48.8
"A1" 486+81.3 L† TO "A1" 494+99.8 L†	12DD	948.0	1				1		394.2
"A1" 488+34.9 R† TO "A1" 494+99.8 R†	12B	668.0			1		1		311.0
"A1" 503+21.8 L† TO "A1" 516+50.5 L†	12B	1,328.7			1		1		585.8
"A1" 503+21.8 R† TO "A1" 517+00.0 R†	12DD	1,378.2	1				1		573.1
"A1" 521+88.0 L† TO "A1" 522+25.5 L†	12A	37.5	1			1			35.7
"A1" 556+55.0 L† TO "A1" 567+97.2 L†	12DD	1,142.2	1				1		475.0
"A1" 556+97.0 R† TO "A1" 567+83.0 R†	12A	1,086.0				1	1		471.8
"A1" 570+58.5 L† TO "A1" 580+85.2 L†	12B	1,026.7			1		1		460.2
"A1" 570+37.6 R† TO "A1" 580+55.0 R†	12DD	1,017.4	1				1		423.1
"A1" 674+38.2 L† TO "A1" 677+36.40 L†	12DD	298.2	1				1		124.0
"A1" 674+01.5 R† TO "A1" 677+36.8 R†	12B	334.9			1		1		172.5
"A1" 679+22.1 L† TO "A3" 683+44.7 L†	12A	423.6				1	1		208.9
"A1" 679+22.1 R† TO "A2" 683+70.8 R†	12DD	449.7	1				1		186.6
"W1" 19+81.0 L† TO "W1" 21+65.0 L†	16B	150.0	1		1				95.6
"A3" 698+50.0 R† TO "A3" 700+74.0 L†	16B	178.0	1		1				107.2
"S3" 720+98.0 R† TO "S3" 722+00.0 R†	12A	225.0					1		128.8
"A2" 718+22.3 R† TO "A2" 718+47.0 R†	16C	37.5		1	1		1		0
"A2" 733+71.5 R† TO "A2" 734+09.0 R†	16B	37.5	1		1				48.8
TOTAL		13,254.6	19	1	11	9	14	1	6,057.1

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

GRIND AND GROOVE EXISTING CONCRETE PAVEMENT

STATION LIMITS	LOCATION	GRIND EXISTING CONCRETE PAVEMENT	GROOVE EXISTING CONCRETE PAVEMENT
		SQYD	SQYD
"A1" 239+22.5 TO "A1" 479+00.0	R†	31,970	31,970
"A1" 547+85.0 TO "A1" 567+73.1	R†	2,651	2,651
"A1" 570+78.7 TO "A1" 677+26.4	R†	14,197	14,197
"A1" 679+32.1 TO "A2" 688+54.5	R†	1,230	1,230
"A1" 239+22.5 TO "A1" 483+12.0	L†	32,519	32,519
"A1" 550+12.0 TO "A1" 567+85.7	L†	2,365	2,365
"A1" 570+67.3 TO "A1" 677+26.4	L†	14,212	14,212
"A1" 679+32.1 TO "A3" 688+54.5	L†	1,344	1,344
TOTAL		100,488	100,488

PAINT PAVEMENT MARKING

LOCATION	SQFT
REGIONAL TRANSIT PARKING LOT	733
TOTAL	733

SEE PAVEMEMT DELINEATION QUANTITIES FOR TOTAL

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

SUMMARY OF QUANTITIES

Q-5

REVISED BY | DATE REVISED
A. RANDHAWA | A. FONG
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: CYRUS HUI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

LAST REVISION 00-00-00 | DATE PLOTTED => 23-MAR-2011 | TIME PLOTTED => 11:24

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	576	1012

REGISTERED CIVIL ENGINEER 6-15-10 DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER A. Y. FONG No. 64343 Exp 6-30-11 CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TACK COAT

LOCATION	STATION LIMITS	DIRECTION	TACK COAT
			TON
Shld	"A1" 239+22.5 TO "A1" 542+40.0	WB/EB	9.9
#1 LANE	"A1" 483+12.0 TO "A1" 550+12.0	WB	1.6
#1 LANE	"A1" 479+00.0 TO "A1" 547+85.0	EB	13.7
#2 LANE	"A1" 239+22.5 TO "A3" 689+39.8	WB	12.1
#2 LANE	"A1" 239+22.5 TO "A2" 688+54.5	EB	12.1
#3 LANE	"A1" 239+22.5 TO "A3" 689+39.8	WB	14.2
#3 LANE	"A1" 239+22.5 TO "A2" 688+54.5	EB	14.2
AUXI	"A1" 304+25.0 TO "A1" 337+90.0	WB	1.1
AUXI	"A1" 296+55.0 TO "A1" 333+22.5	EB	1.2
MEDIAN	"A1" 239+22.5 TO "A3" 689+69.8	WB	28.6
MEDIAN	"A1" 239+22.5 TO "A2" 689+24.3	EB	28.7
OVERLAYS	"A1" 239+22.5 TO "A2" 738+41.2	WB/EB	39.2
"A2" WIDENING	"A2" 702+10.0 TO "A2" 738+41.2	EB	6.5
"A2" WIDENING	"A3" 703+40.0 TO "A3" 728+87.5	WB	0.9
		TOTAL	172.0

PLACE HMA DIKE

STATION LIMITS	TYPE A	TYPE C	TYPE E	TYPE F	HMA
	LF	LF	LF	LF	TON
"A1" 239+22.5 TO "A1" 250+47.2 L+				1,124.7	14.9
"A1" 239+22.5 TO "A1" 249+85.0 R+				1,062.5	14.1
"A1" 249+85.0 TO "A1" 254+00.0 R+			415.0		10.9
"A1" 250+47.5 TO "A1" 251+22.5 L+		75.0			0.6
"A1" 251+22.5 TO "A1" 254+00.0 L+			277.5		7.3
"A1" 298+49.3 TO "A1" 303+24.7 R+			475.4		12.4
"A1" 304+25.0 TO "A1" 304+88.5 L+				63.5	0.8
"A1" 304+88.5 TO "A1" 305+63.5 L+		75.0			0.6
"A1" 305+37.7 TO "A1" 307+66.5 R+			228.8		6.0
"A1" 305+63.5 TO "A1" 310+00.0 L+			436.5		11.4
"A1" 307+66.5 TO "A1" 308+41.5 R+				50.0	0.6
"A1" 308+41.5 TO "A1" 308+91.5 R+		75.0			0.7
"A1" 308+91.5 TO "A1" 310+00.0 R+			108.5		2.8
"A1" 310+13.0 TO "A1" 315+00.0 L+			487.0		12.7
"A1" 310+13.0 TO "A1" 315+00.0 R+			487.0		12.7
"A1" 315+13.0 TO "A1" 320+00.0 L+			487.0		12.7
"A1" 315+13.0 TO "A1" 320+24.7 R+			511.7		13.4
"A1" 320+13.0 TO "A1" 330+00.0 L+			987.0		25.8
"A1" 320+37.1 TO "A1" 328+90.0 R+			852.9		22.3
"A1" 329+03.0 TO "A1" 332+33.5 R+			330.5		8.6
"A1" 330+13.0 TO "A1" 335+88.5 L+			575.5		15.0
"A1" 332+33.5 TO "A1" 333+08.5 R+		75.0			0.6
"A1" 333+08.5 TO "A1" 333+22.5 R+				14.0	0.2
"A1" 335+88.5 TO "A1" 336+38.5 L+				50.0	0.7
"A1" 336+38.5 TO "A1" 337+13.5 L+		75.0			0.6
"A1" 337+13.5 TO "A1" 337+90.0 L+			76.5		2.0
"A1" 515+50.0 TO "A1" 516+50.5 L+				100.5	1.3
"A1" 515+50.0 TO "A1" 517+00.0 R+				150.0	2.0
"A1" 516+50.5 TO "A1" 517+13.0 L+		62.5			0.5
"A1" 517+13.0 TO "A1" 521+88.0 L+			475.0		12.4
"A1" 517+00.0 TO "A1" 528+12.0 R+			1,112.0		29.1
"A1" 521+88.0 TO "A1" 522+84.0 L+		96.0			0.7
"A1" 534+05.0 TO "A1" 542+30.0 R+			825.0		21.6
"A1" 536+32.0 TO "A1" 542+20.0 L+			588.0		15.4
"S2" 709+50.0 TO "S2" 712+00.0 R+			250.0		6.5
"S3" 720+50.0 TO "A2" 738+41.2 R+			1,791.2		46.8
REGIONAL TRANSIT	80.0				2.0
TOTAL	80.0	533.5	11,778.0	2,615.2	348.8*

* SEE Q-4 FOR TOTAL

MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)

STATION LIMITS	CURB TYPE A1-6	CURB TYPE A3-6	GUTTER	SLOPE
	CY	CY	CY	CY
"A2" 688+43.4 TO "A2" 688+56.8	0.4			
"A2" 720+36.4 TO "A2" 725+00.0			15	
"A3" 701+43.3 TO "A3" 702+12.5		0.7		
"S3" 722+00.0 TO "S3" 725+46.7				91.3
TOTAL	107.4			

RELOCATE GATE

STATION LIMITS	RELOCATE GATE
	EA
"A3" 695+50.0	1
TOTAL	1

LIQUID ASPHALT (PRIME COAT)

STATION LIMITS	DIRECTION	LIQUID ASPHALT (PRIME COAT)
		TON
"A1" 239+22.5 TO "A1" 240+22.5	WB	0.1
"A1" 240+22.5 TO "A1" 271+25.5	WB	2.8
"A1" 304+25.0 TO "A1" 337+90.0	WB	3.1
"A1" 359+00.0 TO "A1" 371+40.0	WB	1.1
"A1" 414+95.0 TO "A1" 425+30.0	WB	0.9
"A1" 486+47.0 TO "A1" 492+93.0	WB	0.6
"A1" 515+50.0 TO "A1" 522+84.0	WB	0.7
"A1" 536+32.0 TO "A1" 542+40.0	WB	0.6
"A1" 239+22.5 TO "A1" 240+22.5	EB	0.1
"A1" 240+22.5 TO "A1" 276+16.5	EB	3.3
"A1" 296+55.0 TO "A1" 303+76.2	EB	0.6
"A1" 298+49.3 TO "A1" 303+76.2	EB	1.2
"A1" 303+76.2 TO "A1" 308+80.0	EB	0.8
"A1" 308+79.6 TO "A1" 332+22.5	EB	2.2
"A1" 337+22.5 TO "A1" 359+50.0	EB	2.0
"A1" 381+00.0 TO "A1" 393+30.0	EB	1.1
"A1" 402+17.0 TO "A1" 409+42.0	EB	0.7
"A1" 473+35.0 TO "A1" 479+45.0	EB	0.6
"A1" 515+50.0 TO "A1" 528+12.0	EB	1.2
"A1" 534+05.0 TO "A1" 542+40.0	EB	0.8
"A2" 702+09.5 TO "A2" 712+00.0	EB	1.9
"A2" 704+00.0 TO "A2" 738+36.6	EB	11.1
"S2" 711+50.0 TO "S2" 713+00.0	EB	0.5
"S2" 711+50.0 TO "S2" 713+00.0	EB	0.3
"S2" 711+50.0 TO "S2" 713+86.0	EB	0.3
"S3" 720+50.0 TO "S3" 725+50.0	EB	2.2
"S3" 703+41.0 TO "S3" 713+12.5	EB	2.3
TOTAL		43.1

PLACE HMA (Misc AREA)

DESCRIPTION	SQYD	TON
HMA OVERSIDE DRAINS	59.3	10.0**

** SEE Q-4 FOR TOTAL

EROSION CONTROL (HYDROSEED)

LOCATION	AREA
	ACRE
AREA 1	0.03
AREA 2	0.08
AREA 3	2.30
AREA 4	2.12
AREA 5	0.13
AREA 6	0.01
AREA 7	0.16
AREA 8	0.40
AREA 9	0.05
AREA 10	0.12
AREA 11	0.36
AREA 12	0.95
TOTAL	~~5.76~~ 6.71

1

TEMPORARY WATER POLLUTION CONTROL

ITEM DESCRIPTION	QTY	UNIT
TEMPORARY FIBER ROLL	24,834	LF
TEMPORARY SILT FENCE	43,314	LF
TEMPORARY GRAVEL BAG BERM	3,065	LF
TEMPORARY CONSTRUCTION ENTRANCE	56	EA
TEMPORARY COVER	24,200	SQYD
TEMPORARY CHECK DAM	277	LF
TEMPORARY DRAINAGE INLET PROTECTION	178	EA
TEMPORARY EROSION CONTROL BLANKET	161,100	SQYD
TEMPORARY SOIL BINDER	20,600	SQYD

SUMMARY OF QUANTITIES

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

REVISED BY | DATE REVISED
A. RANDHAWA | A. FONG
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: CYRUS HUI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans®
NORTH REGION
OFFICE OF DESIGN SOUTH
DESIGN BRANCH S7

LAST REVISION 00-00-00 | DATE PLOTTED => 23-MAR-2011 | TIME PLOTTED => 11:25

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac, Yol	80	R10.9/R11.7, M0.0/M10.4	819	1012

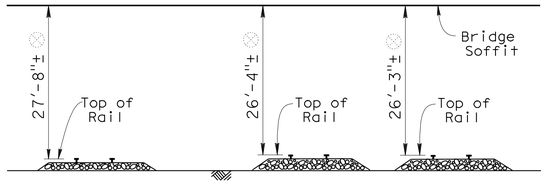
Eric Watson 3/26/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011



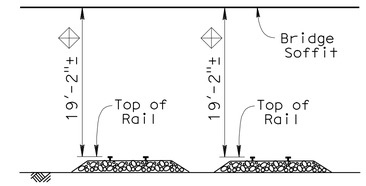
1 U.P.R.R. CLEARANCE

NO SCALE

LEGEND:

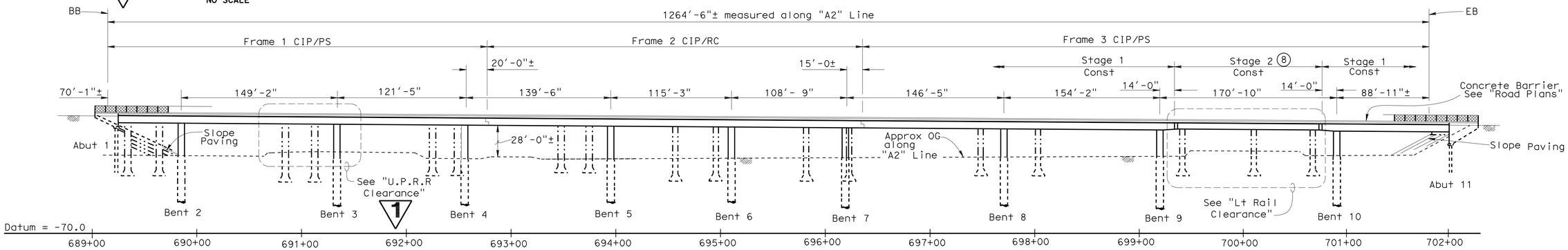
Vertical clearances obtained from "AS BUILT" plans.

Based on soffit and rail elevations from survey taken in January 2011



LT RAIL CLEARANCE

NO SCALE

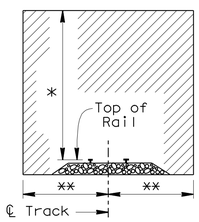


MIRRORED ELEVATION

1" = 50'

NOTES:

1. Paint "Del Paso Park Separation & OH".
2. Paint "Br. No. 24-0193R".
3. Structure Approach Type N (30S).
4. Structure Approach Type R (30D).
5. Structure Approach Type R(30S)
6. Remove existing barrier & top of wingwall.
7. Match existing grade & cross slope.
8. Cast Span high and lower to final position.
9. Deck Drain Type D-3.



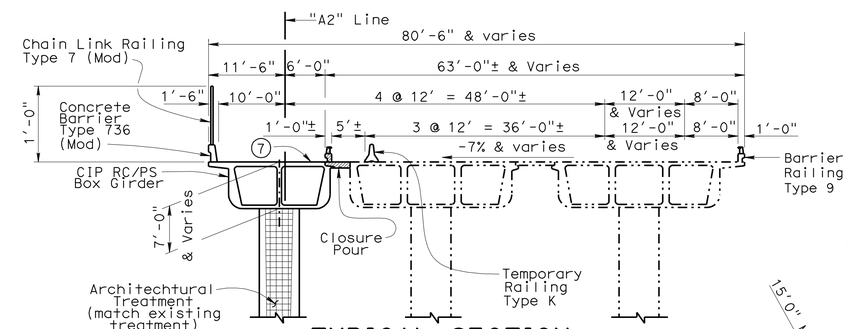
MINIMAL CONSTRUCTION CLEARANCE ENVELOPE

3/32" = 1'-0"

NO CONSTRUCTION ACTIVITIES OR OTHER OBSTRUCTIONS SHALL BE PLACED WITHIN THESE LIMITS

* 21'-0" For UPRR
19'-0" For RT

** 9'-0" For Bent 3
12'-0" For Span 3
7'-0" For Span 9

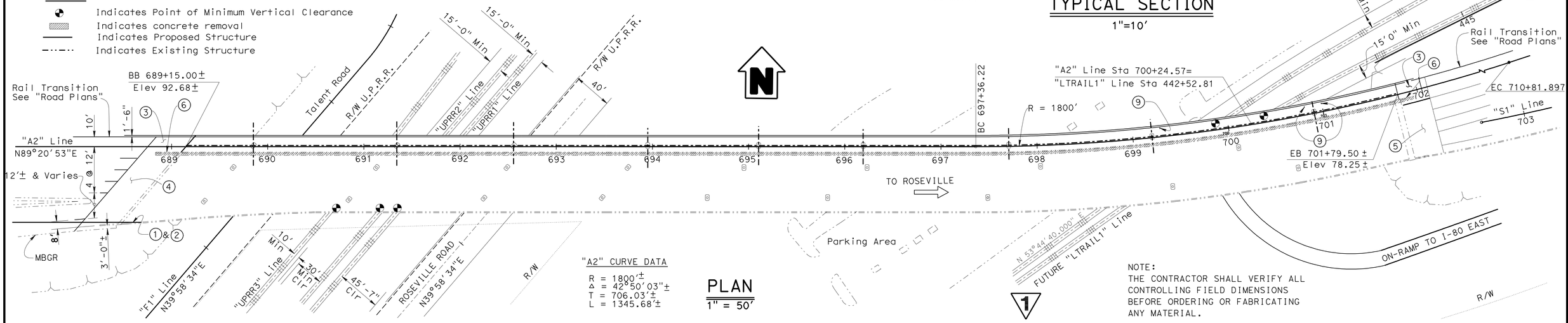


TYPICAL SECTION

1"=10'

LEGEND:

Indicates Point of Minimum Vertical Clearance
Indicates concrete removal
Indicates Proposed Structure
Indicates Existing Structure



"A2" CURVE DATA

R = 1800'±
Δ = 42°50'03"±
T = 706.03'±
L = 1345.68'±

PLAN

1" = 50'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

X Jeff Sims DESIGN ENGINEER	DESIGN	BY Kyoung Lee	CHECKED Asnaashari/Aquino	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE
	DETAILS	BY Huddleston/Herron	CHECKED Asnaashari/Aquino/S. J.	LAYOUT BY Kyoung Lee	CHECKED Asnaashari/Aquino
	QUANTITIES	BY Greg Thornton	CHECKED Jinrong Zhou	SPECIFICATIONS BY James Choi	PLANS AND SPECS COMPARED James Choi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

CU 03
EA 379701

BRIDGE NO. 24-0193R
POST MILE 9.0

DEL PASO PARK OVERHEAD (WIDEN)
GENERAL PLAN

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 11-15-06 3/26/10 2/17/11 01/05/06 7/18/08 10/17/08 01/23/09 03/13/09 04/17/09

SHEET 1 OF 58

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

FILE => 24-0193r-a-gp01.add

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.07-24-06)

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:25

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac,Yol	80	R10.9/R11.7, M0.0/M10.4	821	1012

Eric Watson 3/26/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA

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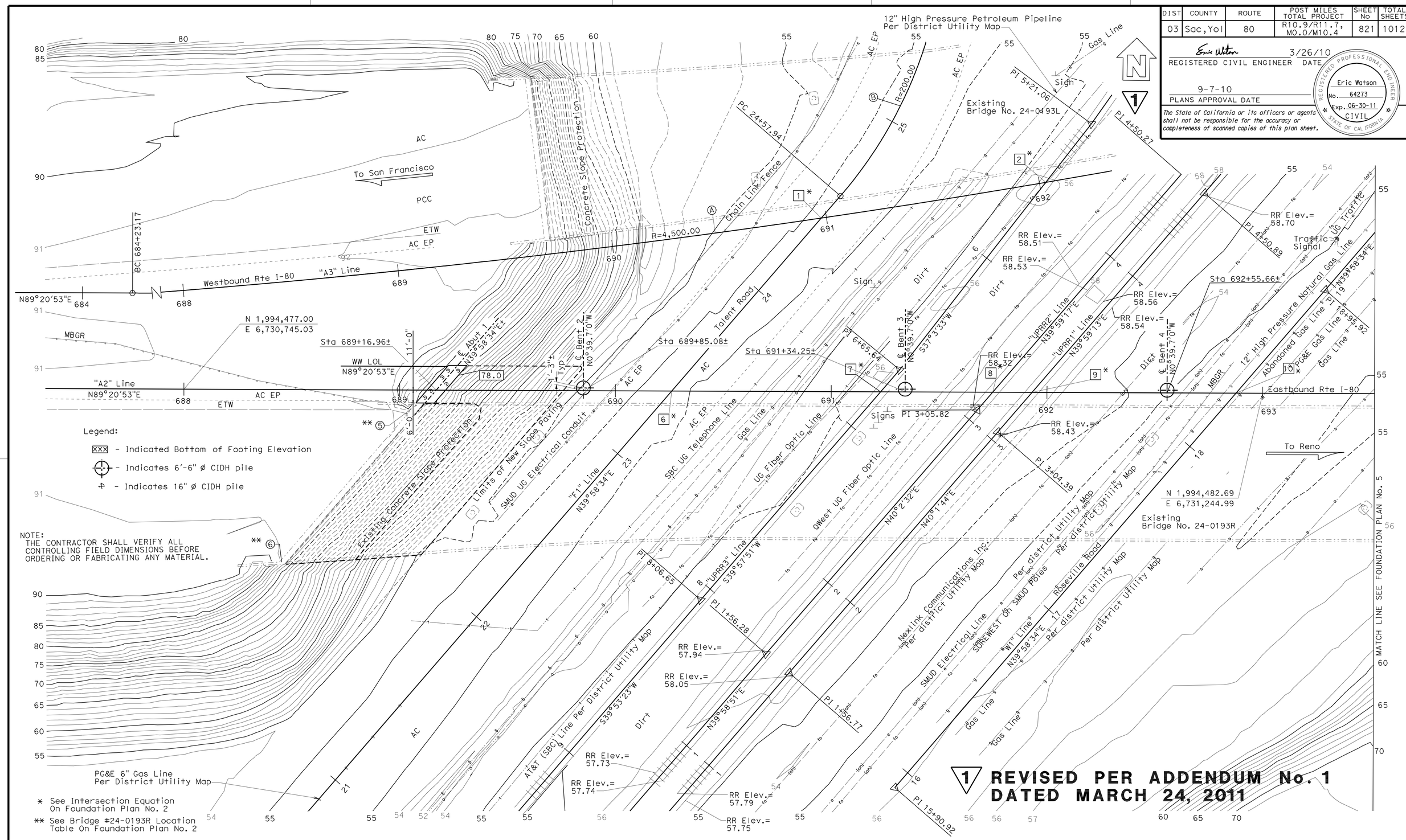


Legend:

XXX - Indicated Bottom of Footing Elevation

⊕ - Indicates 6'-6" ø CIDH pile

⊕ - Indicates 16" ø CIDH pile

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

* See Intersection Equation On Foundation Plan No. 2

** See Bridge #24-0193R Location Table On Foundation Plan No. 2

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

PRELIMINARY INVESTIGATION SECTION										
SCALE	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X								
1"=20'	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY District/T.Mason	CHECKED	BY E.Lopez	11/2007				
ALIGNMENT TIES Dist.Traverse sheet		DRAFTED	BY T.Zolnikova 11/2007	CHECKED	BY T.Mason	11/2007				

DESIGN	BY Kyoung Lee	CHECKED Asnaashari/Aquino
DETAILS	BY Jinrong Zhou	CHECKED Asnaashari/Aquino
QUANTITIES	BY Greg Thornton	CHECKED Jinrong Zhou

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0193R
POST MILE 9.0

DEL PASO PARK OVERHEAD (WIDEN)
FOUNDATION PLAN NO. 1

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 12/10/07 7/24/08 03/15/09

SHEET 3 OF 58

FILE => 24-0193r-e-fp101.add

USERNAME => trmikesl DATE PLOTTED -> 23-MAR-2011 TIME PLOTTED -> 11:25

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac,Yol	80	R10.9/R11.7, M0.0/M10.4	822	1012

Eric Watson 3/26/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER — Eric Watson No. 64273 Exp. 06-30-11 CIVIL — STATE OF CALIFORNIA

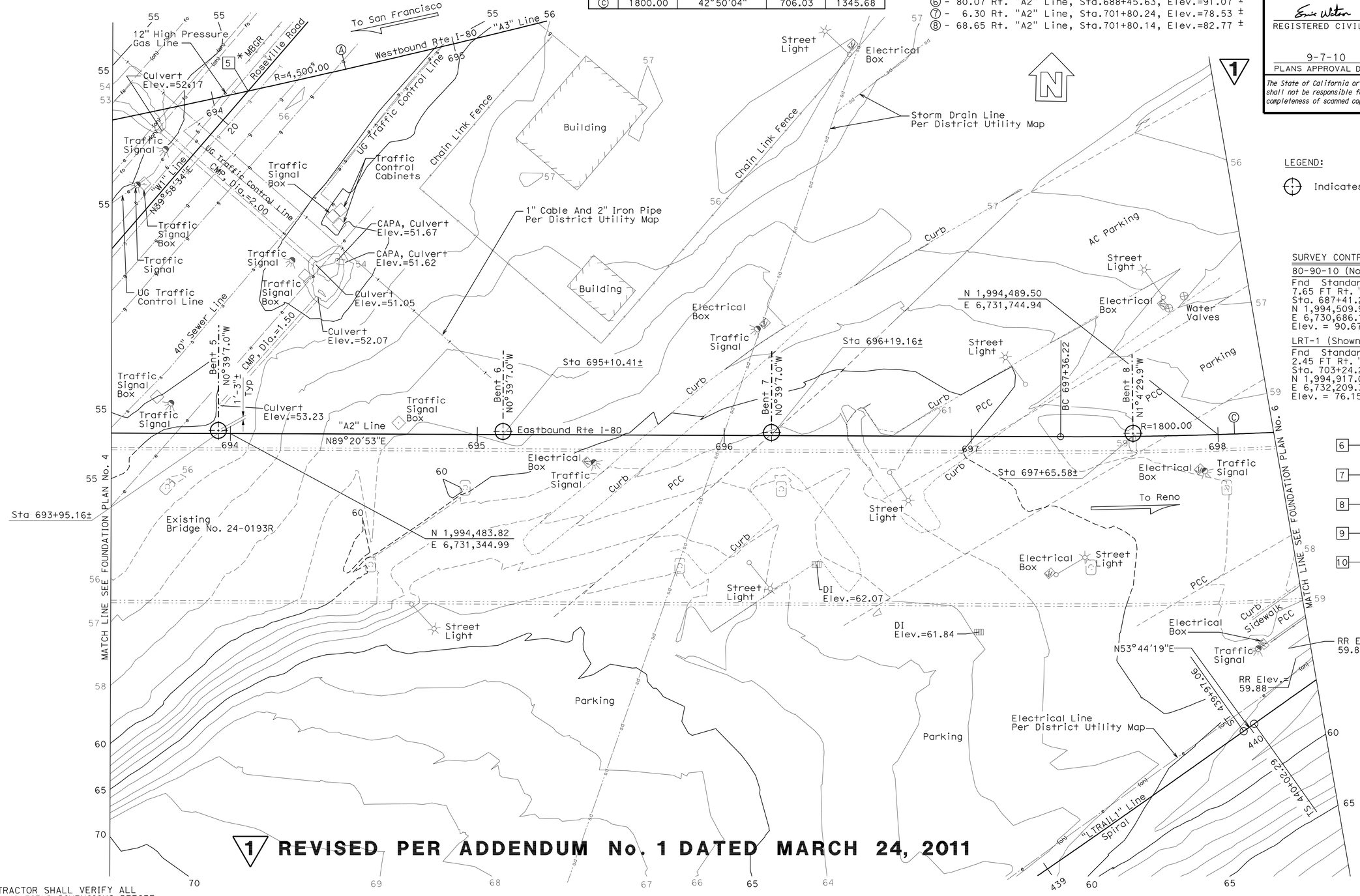
* See Intersection Equation On Foundation Plan No.1

CURVE DATA

No.	R	Δ	T	L
Ⓒ	1800.00	42°50'04"	706.03	1345.68

BRIDGE No. 24-0193R LOCATION

⑤ - 6.92 Rt. "A2" Line, Sta.689+07.88, Elev.=92.24 ±
⑥ - 80.07 Rt. "A2" Line, Sta.688+45.63, Elev.=91.07 ±
⑦ - 6.30 Rt. "A2" Line, Sta.701+80.24, Elev.=78.53 ±
⑧ - 68.65 Rt. "A2" Line, Sta.701+80.14, Elev.=82.77 ±



LEGEND:

⊕ Indicates 78" Ø CIDH pile

SURVEY CONTROL

80-90-10 (Not Shown On Plan)
Fnd Standard CT Brass Disk in Conc.
7.65 FT Rt. "A3" Line Rte I-80
Sta. 687+41.23
N 1,994,509.93
E 6,730,686.16
Elev. = 90.67

LRT-1 (Shown on Br No. 24-0193L, Plan No. 3)
Fnd Standard CT Brass Disk in Conc.
2.45 FT Rt. "A3" Line Rte I-80
Sta. 703+24.28
N 1,994,917.09
E 6,732,209.35
Elev. = 76.15

6 "A2" Line Sta 690+26.08= "F1" Line Sta 23+38.40

7 "A2" Line Sta 691+22.89= "UPRR3" Line Sta 6+79.13

8 "A2" Line Sta 691+74.83= "UPRR2" Line Sta 3+16.71

9 "A2" Line Sta 691+93.08= "UPRR1" Line Sta 3+28.72

10 "A2" Line Sta 692+87.59= "W1" Line Sta 18+32.70

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PRELIMINARY INVESTIGATION SECTION									
SCALE 1"=20'	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X							
	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY District/T.Mason	CHECKED	BY E.Lopez	11/2007			
	ALIGNMENT TIES Dist.Traverse Sheet	DRAFTED	BY T.Zolnikova 11/2007	CHECKED	BY T.Mason	11/2007			

DESIGN	BY Kyoung Lee	CHECKED Asnaashari/Aquino
DETAILS	BY Jinrong Zhou/S. Jiang	CHECKED Asnaashari/Aquino
QUANTITIES	BY Greg Thornton	CHECKED Jinrong Zhou

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 1

BRIDGE NO. 24-0193R
POST MILE 9.0

DEL PASO PARK OVERHEAD (WIDEN)
FOUNDATION PLAN NO. 2

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 12/19/07 7/9/08 03/16/09 04/21/09

REVISION DATES

SHEET 4 OF 58

FILE => 24-0193r-e-fp102.add

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:25

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac,Yol	80	R10.9/R11.7, M0.0/M10.4	823	1012

Eric Watson 3/26/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 06-30-11 CIVIL STATE OF CALIFORNIA

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LEGEND:

XXX - Indicated Bottom of Footing Elevation

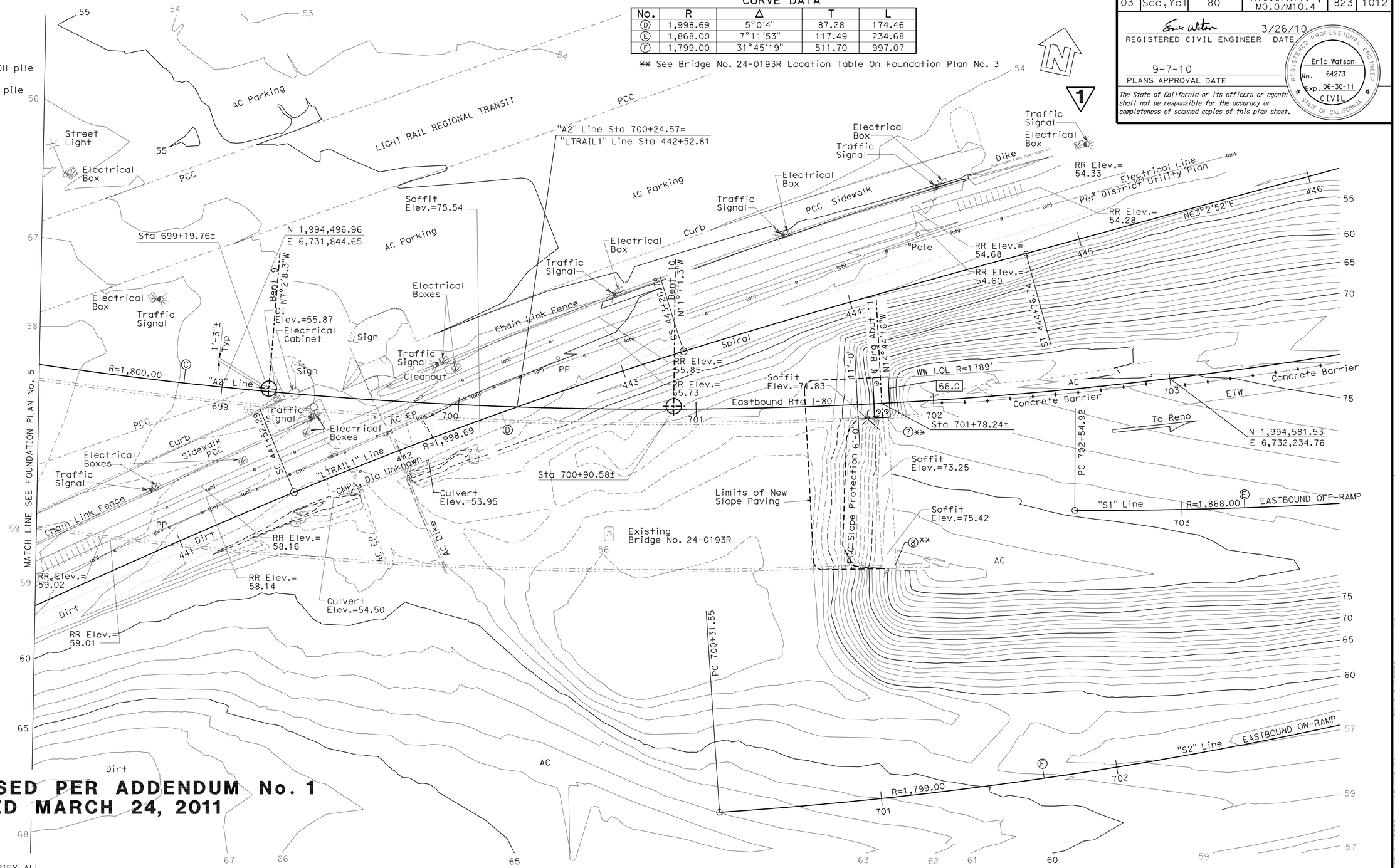
- Indicates 6'-6" Ø CIDH pile

- Indicates 16" Ø CIDH pile

CURVE DATA

No.	R	Δ	T	L
D	1,998.69	5°0'4"	87.28	174.46
E	1,868.00	7°11'53"	117.49	234.68
F	1,799.00	31°45'19"	511.70	997.07

** See Bridge No. 24-0193R Location Table On Foundation Plan No. 3



1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PRELIMINARY INVESTIGATION SECTION									
SCALE	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X							
1"=20'	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY District/T.Mason	CHECKED	BY E.Lopez	11/2007			
ALIGNMENT TIES Dist.Traverse Sheet		DRAFTED	BY T.Zolnikova 11/2007	CHECKED	BY T.Mason	11/2007			

	BY	CHECKED
DESIGN	Kyoung Lee	Asnaashari/Aquino
DETAILS	Jinrong Zhou	Asnaashari/Aquino
QUANTITIES	Greg Thornton	Jinrong Zhou

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0193R
POST MILE 8.9

DEL PASO PARK OVERHEAD (WIDEN)
FOUNDATION PLAN NO. 3

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 12/19/07 7/9/08 7/9/08 01/06/09 03/15/09 3/24/10

SHEET 5 OF 58

FILE => 24-0193r-e-fp103.add

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:25

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac,Yol	80	R10.9/R11.7, M0.0/M10.4	877	1012

Eric Watson 3/29/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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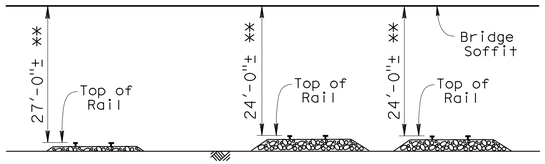
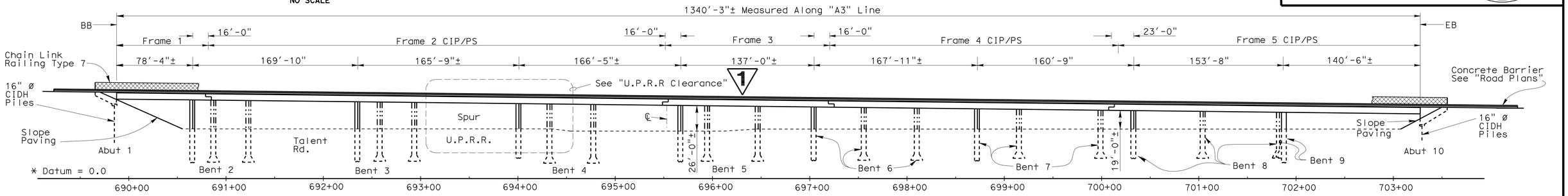
1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011



1 U.P.R.R. CLEARANCE

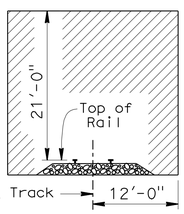
NO SCALE

** - Based on soffit and rail elevations from survey taken in January 2011



ELEVATION

1" = 50'



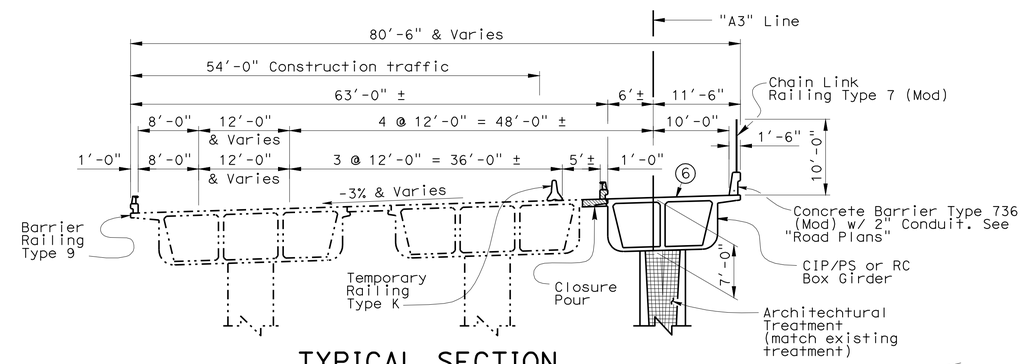
NO CONSTRUCTION ACTIVITIES OR OTHER OBSTRUCTIONS SHALL BE PLACED WITHIN THESE LIMITS

MINIMAL CONSTRUCTION CLEARANCE ENVELOPE

3/32" = 1'-0"
(Normal to Railroad)

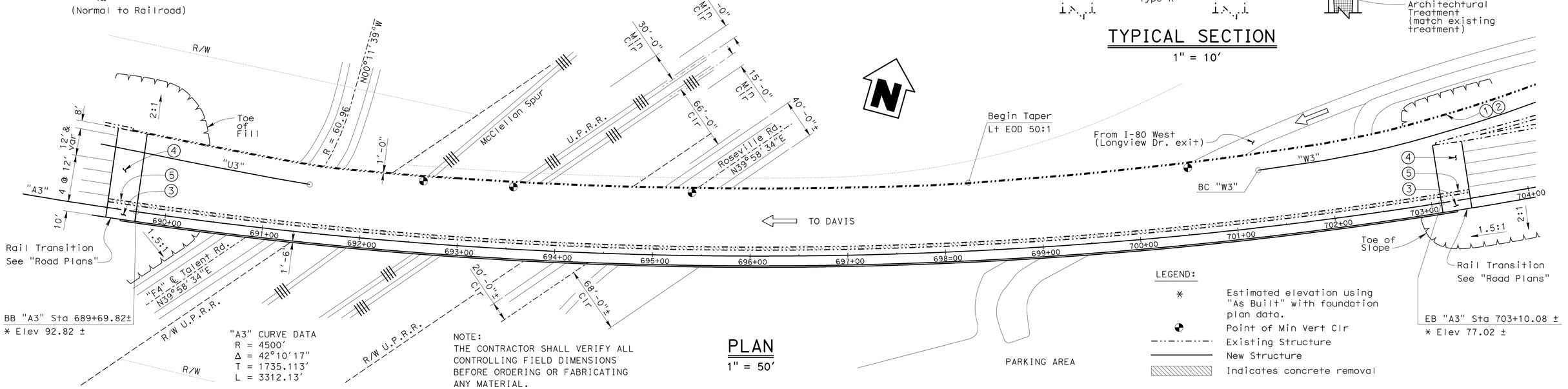
NOTES:

1. Paint "Del Paso Park Separation & OH"
2. Paint "Br. No. 24-0193L"
3. Structure Approach Type N (30D), Type N (30S)
4. Structure Approach Type R (30D)
5. Remove existing barrier & top of wingwall
6. Match existing grade & cross slope



TYPICAL SECTION

1" = 10'



PLAN

1" = 50'

LEGEND:

- * Estimated elevation using "As Built" with foundation plan data.
- Point of Min Vert Clr
- Existing Structure
- New Structure
- Indicates concrete removal

Jeff Sims DESIGN ENGINEER	DESIGN	BY Eric Watson	CHECKED Greg Jones/April Pearson	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 PERMIT DESIGN VEHICLE
	DETAILS	BY Bob Huddleston/Jie Tang	CHECKED Greg Jones/April Pearson	LAYOUT: BY Eric Watson	CHECKED Greg Jones
	QUANTITIES	BY Daniel Sessions	CHECKED April Pearson	SPECIFICATIONS: BY James Choi	PLANS AND SPECS COMPARED James Choi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0193L
POST MILE 9.0

DEL PASO PARK OVERHEAD (WIDEN)
GENERAL PLAN

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/05)

To get to the Caltrans web site, go to: http://www.dot.ca.gov

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 10/23/06 5-24-09 3/25/10 2-16-11 03-12-08 04-10-08 08-06-08 12-12-08 04-23-09

SHEET 1 OF 54

FILE => 24-0193I-a-gp01.add

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.07-24-06)

USERNAME => trmikest DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac,Yol	80	R10.9/R11.7, M0.0/M10.4	879	1012

Eric Watson 3/29/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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CURVE DATA

No.	R	Δ	T	L
Ⓐ	4,500.00	42°10'17"	1735.11	3312.13
Ⓑ	200.00	40°10'13"	73.13	140.22

** See Bridge No. 24-90193L Location Table on Foundation Plan No.3

1 "A3" Line Sta 690+97.62= "F1" Line Sta 24+44.39
2 "A3" Line Sta 692+02.95= "UPRR3" Line Sta 5+55.47
3 "A3" Line Sta 692+74.58= "UPRR2" Line Sta 4+62.08
4 "A3" Line Sta 692+96.90= "UPRR1" Line Sta 4+79.71
5 "A3" Line Sta 694+14.67= "W1" Line Sta 20+15.57
6 "A2" Line Sta 690+26.08= "F1" Line Sta 23+38.40
7 "A2" Line Sta 691+22.89= "UPRR3" Line Sta 6+79.13
8 "A2" Line Sta 691+74.83= "UPRR2" Line Sta 3+16.71
9 "A2" Line Sta 691+93.08= "UPRR1" Line Sta 3+28.72
10 "A2" Line Sta 692+87.59= "W1" Line Sta 18+32.70

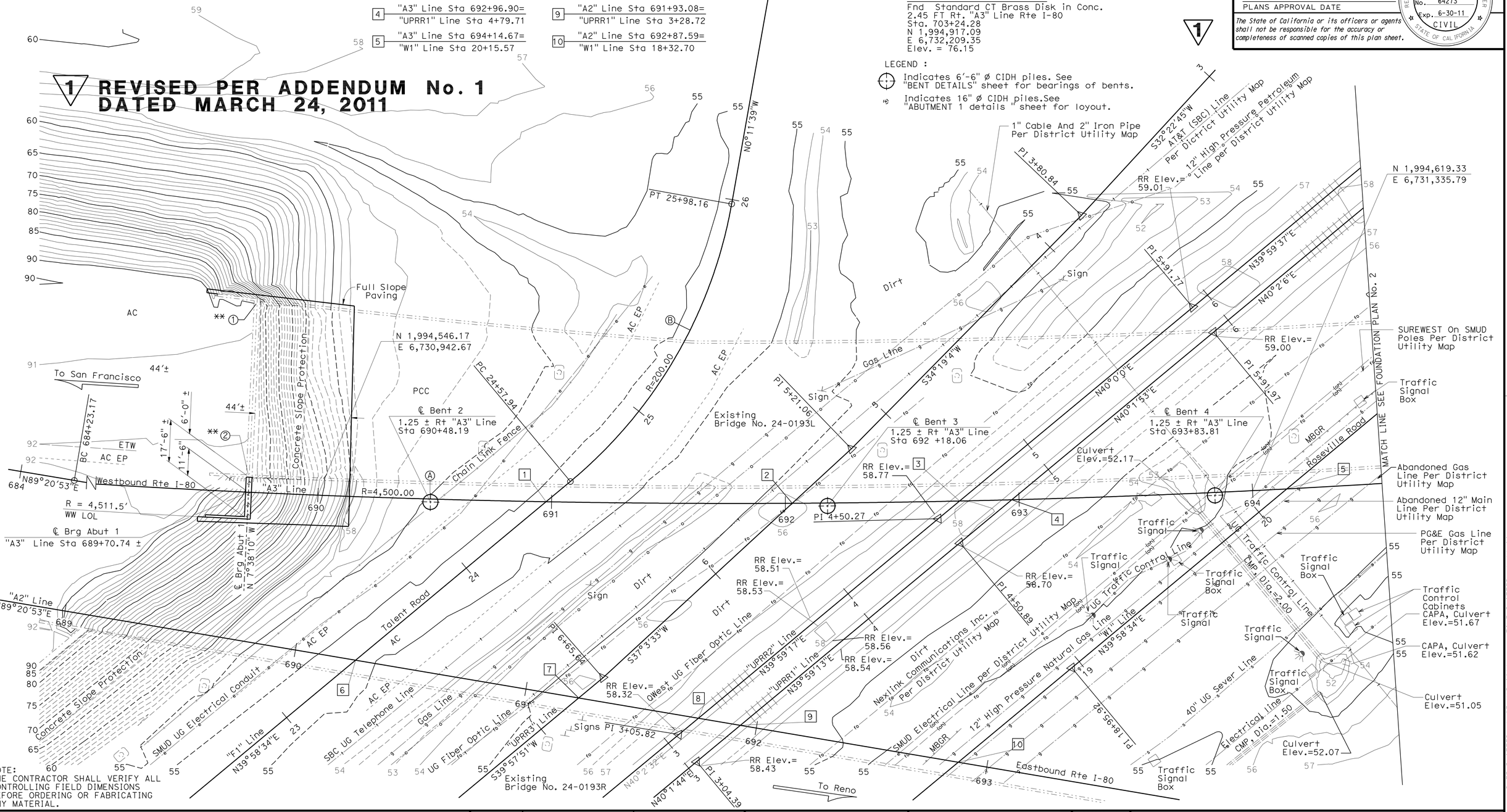
SURVEY CONTROL

80-90-10 (Not Shown On Plan)
Fnd Standard CT Brass Disk in Conc.
7.65 FT Rt. "A3" Line Rte I-80
Sta. 687+41.23
N 1,994,509.93
E 6,730,686.16
Elev. = 90.67

LRT-1 (Shown On Plan No.3)
Fnd Standard CT Brass Disk in Conc.
2.45 FT Rt. "A3" Line Rte I-80
Sta. 703+24.28
N 1,994,917.09
E 6,732,209.35
Elev. = 76.15

LEGEND :
Indicates 6'-6" ø CIDH piles. See "BENT DETAILS" sheet for bearings of bents.
Indicates 16" ø CIDH piles.See "ABUTMENT 1 details " sheet for loyout.

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

PRELIMINARY INVESTIGATION SECTION										
SCALE	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X					DESIGN	BY Eric Watson	CHECKED Greg Jones	
1"=20'	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY District/T.Mason	CHECKED	BY E.Lopez	11/2007	DETAILS	BY Jie Tang	CHECKED Greg Jones	
ALIGNMENT TIES Dist.Traverse sheet		DRAFTED	BY T.Zolnikova 11/2007	CHECKED	BY T.Mason	11/2007	QUANTITIES	BY Daniel Sessions	CHECKED April Pearson	

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

CU 03
EA 379701

BRIDGE NO. 24-0193L
POST MILE 9.0

DEL PASO PARK OVERHEAD (WIDEN)
FOUNDATION PLAN NO. 1

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 03/14/08 12/12/08 04/22/09 4/12/10

REVISION DATES

SHEET 3 OF 54

FILE => 24-0193l-e-fp101.add

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac, Yol	80	R10.9/R11.7, M0.0/M10.4	880	1012

Eric Watson 3/29/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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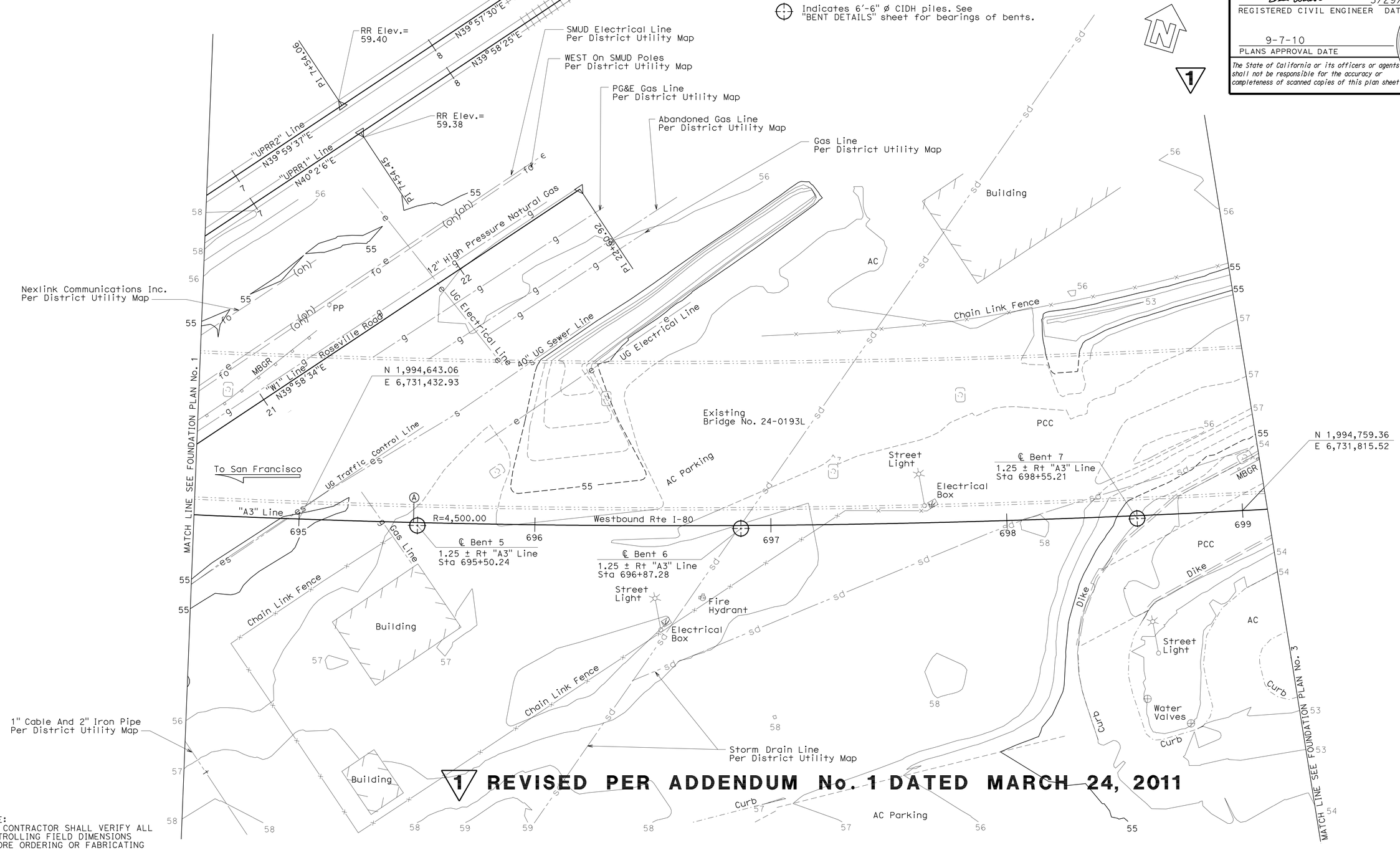
Legend :

Indicates 6'-6" ø CIDH piles. See "BENT DETAILS" sheet for bearings of bents.



1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

NOTE:
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PRELIMINARY INVESTIGATION SECTION										
SCALE 1"=20'	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X								
	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY	District/T.Mason	CHECKED	BY	E.Lopez	11/2007		
	ALIGNMENT TIES Dist.Traverse Sheet	DRAFTED	BY	T.Zolnikova 11/2007	CHECKED	BY	T.Mason	11/2007		

DESIGN	BY Eric Watson	CHECKED Greg Jones
DETAILS	BY Jie Tang	CHECKED Greg Jones
QUANTITIES	BY Daniel Sessions	CHECKED April Pearson

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0193L
POST MILE 9.0

DEL PASO PARK OVERHEAD (WIDEN)
FOUNDATION PLAN NO. 2

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES → 03/12/08 12/12/08 04/22/09

REVISION DATES

SHEET 4 OF 54

FILE => 24-0193l-e-fp102.add

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Sac,Yol	80	R10.9/R11.7, M0.0/M10.4	881	1012

REGISTERED CIVIL ENGINEER — DATE 3/29/10

9-7-10
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — Eric Watson No. 64273 Exp. 6-30-11 CIVIL — STATE OF CALIFORNIA

BRIDGE No. 24-0193L LOCATION

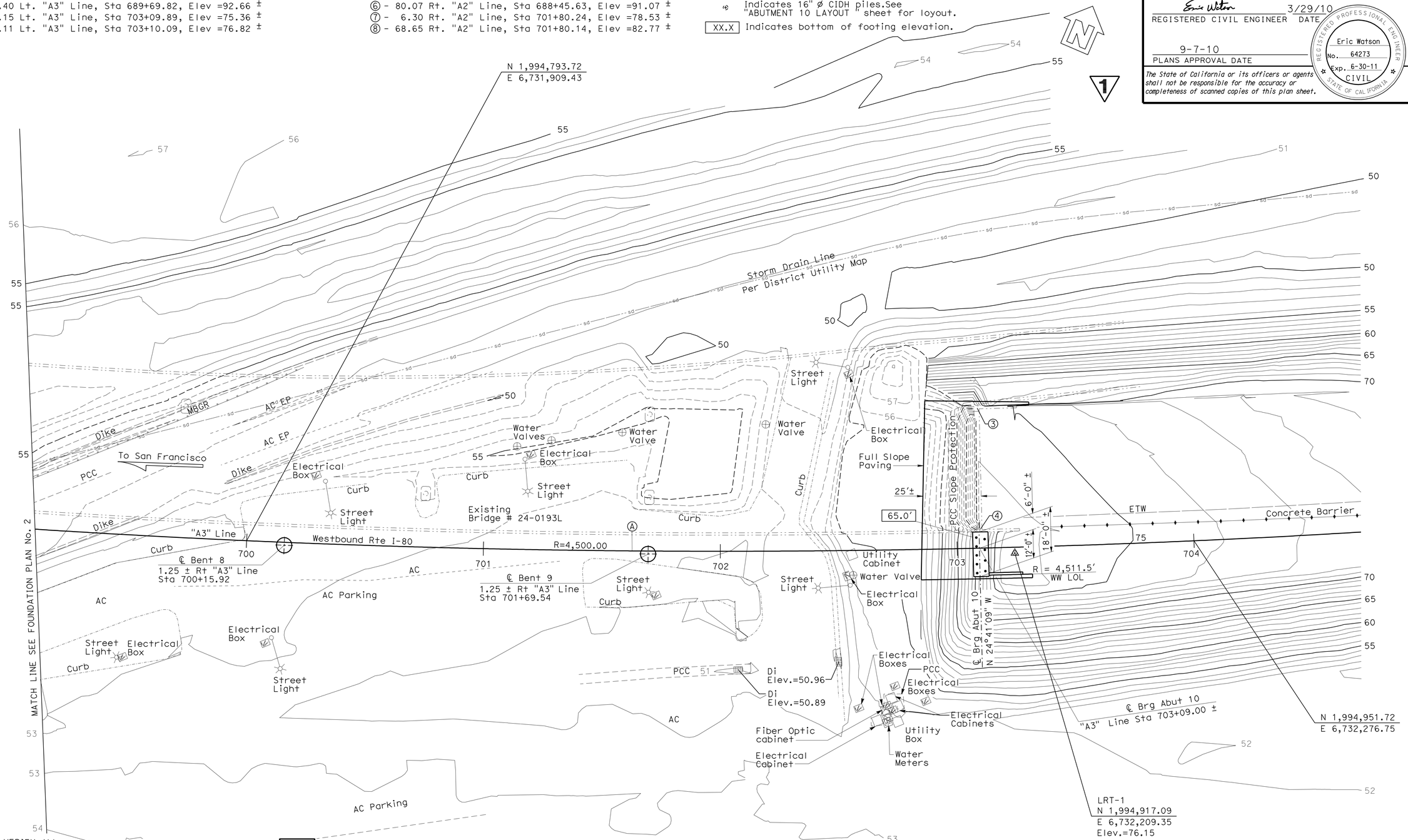
① - 80.61 Lt. "A3" Line, Sta 689+69.78, Elev =90.69 ±
② - 7.40 Lt. "A3" Line, Sta 689+69.82, Elev =92.66 ±
③ - 59.15 Lt. "A3" Line, Sta 703+09.89, Elev =75.36 ±
④ - 8.11 Lt. "A3" Line, Sta 703+10.09, Elev =76.82 ±

BRIDGE No. 24-0193R LOCATION

⑤ - 6.92 Rt. "A2" Line, Sta 689+07.88, Elev =92.24 ±
⑥ - 80.07 Rt. "A2" Line, Sta 688+45.63, Elev =91.07 ±
⑦ - 6.30 Rt. "A2" Line, Sta 701+80.24, Elev =78.53 ±
⑧ - 68.65 Rt. "A2" Line, Sta 701+80.14, Elev =82.77 ±

LEGEND:

Indicates 6'-6" ø CIDH piles. See "BENT DETAILS" sheet for bearings of bents.
Indicates 16" ø CIDH piles.See "ABUTMENT 10 LAYOUT " sheet for loyout.
XX.X Indicates bottom of footing elevation.



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1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

PRELIMINARY INVESTIGATION SECTION							
SCALE	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X					
1"=20'	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY District/T.Mason	CHECKED	BY E.Lopez	11/2007	
ALIGNMENT TIES Dist.Traverse Sheet		DRAFTED	BY T.Zolnikova 11/2007	CHECKED	BY T.Mason	11/2007	

DESIGN	BY Eric Watson	CHECKED Greg Jones
DETAILS	BY Jie Tang	CHECKED Greg Jones
QUANTITIES	BY Daniel Sessions	CHECKED April Pearson

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0193L
POST MILE 9.0

DEL PASO PARK OVERHEAD (WIDEN)
FOUNDATION PLAN NO. 3

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 04/06/08 12/12/08 04/22/09 3/26/10 4/12/10

SHEET 5 OF 54

FILE => 24-0193l-e-fp103.dgn

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	952	1012

Eric Watson 4/6/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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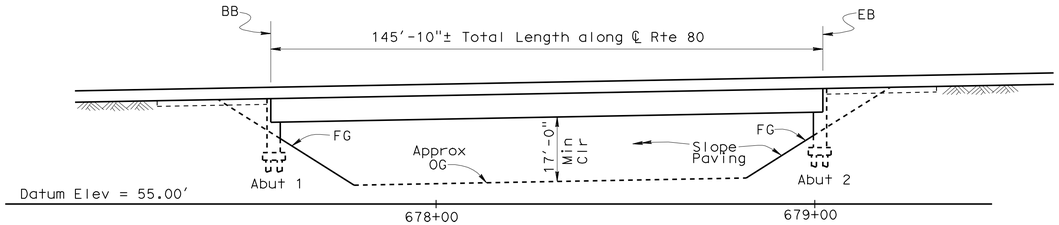
1



ELEVATION A-A

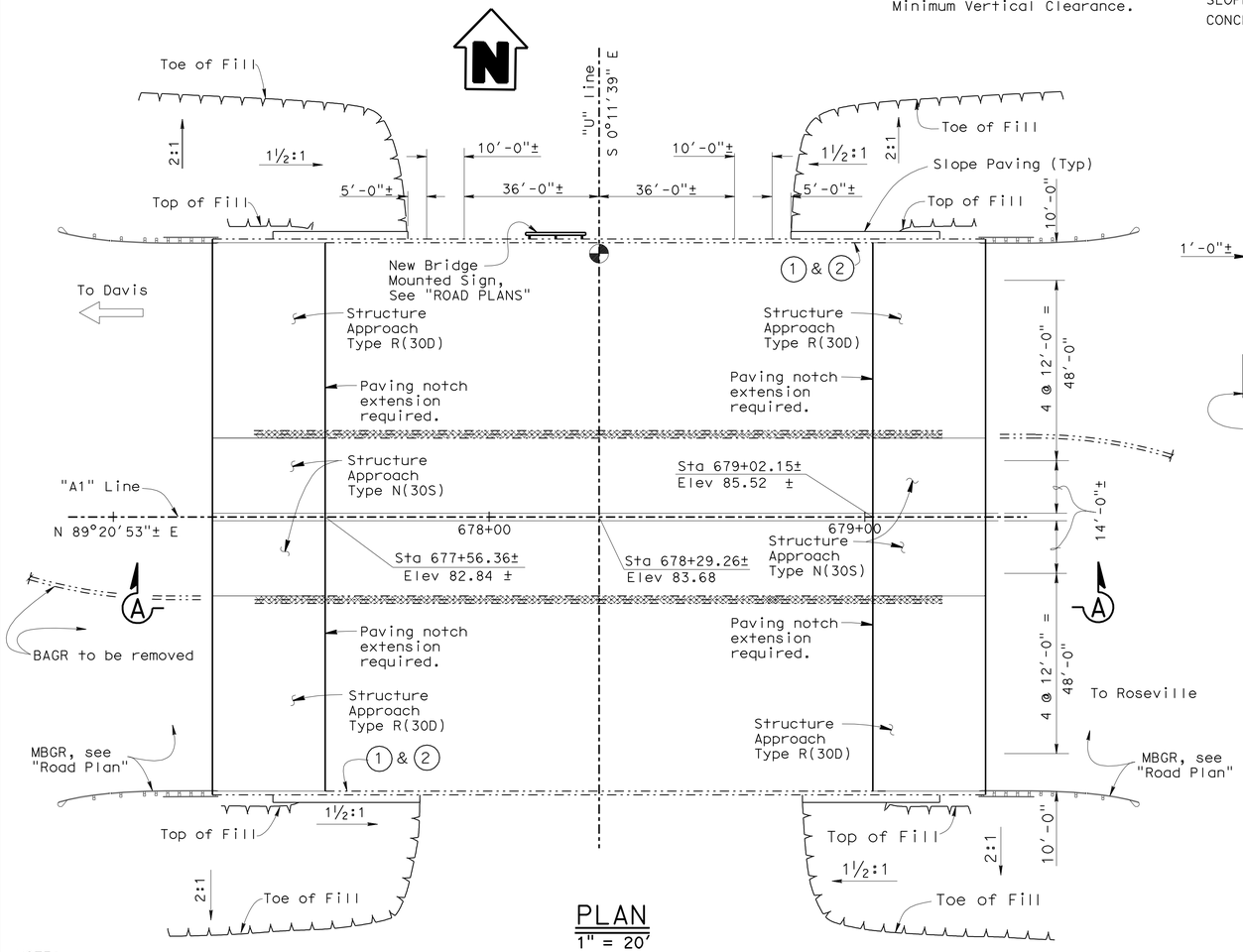
1" = 20'

Notes:

1. Paint "Winters Street Undercrossing".
2. Paint "Br. No. 24-0205".

Legend :

- Existing Structure.
- Indicates limits of Bridge Removal.
- Indicates Point of Minimum Vertical Clearance.



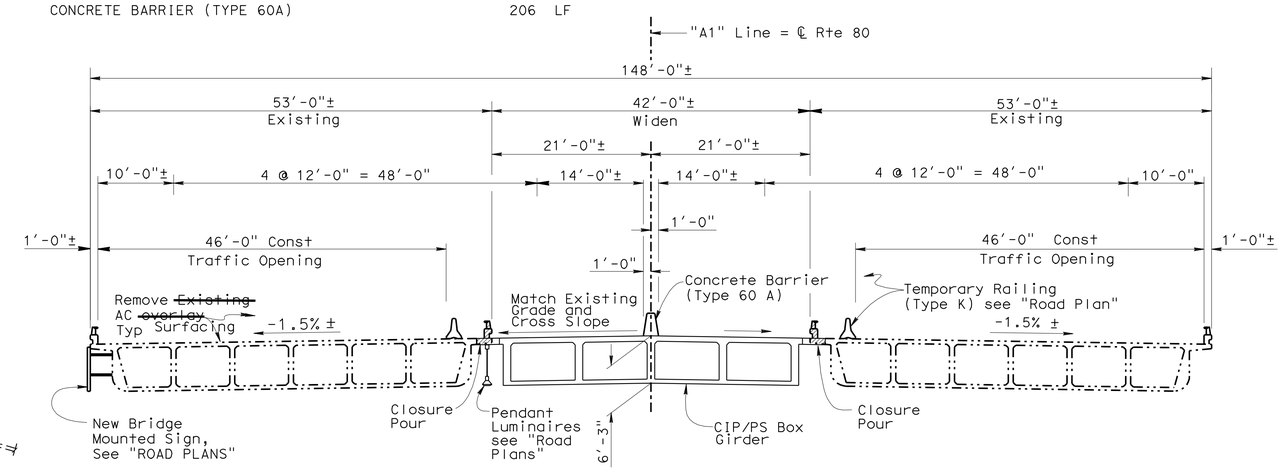
PLAN

1" = 20'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

QUANTITIES

REMOVE ASPHALT CONCRETE SURFACING	14,290	SQFT
BRIDGE REMOVAL (PORTION), LOCATION D	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	124	CY
STRUCTURE BACKFILL (BRIDGE)	267	CY
AGGREGATE BASE (APPROACH SLAB)	24	CY
16" CAST-IN-DRILLED-HOLE CONCRETE PILING	1,739	LF
PRESTRESSING CAST-IN-PLACE CONCRETE	LUMP	SUM
STRUCTURAL CONCRETE, BRIDGE FOOTING	37	CY
STRUCTURAL CONCRETE, BRIDGE	590	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	94	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	234	CY
PAVING NOTCH EXTENSION	151	CF
JOINT SEAL (MR 1")	296	LF
BAR REINFORCING STEEL (BRIDGE)	108,980	LB
SLOPE PAVING (CONCRETE)	102	CY
CONCRETE BARRIER (TYPE 60A)	206	LF



TYPICAL SECTION

1" = 10'

INDEX TO PLANS

SHEET NO.	TITLE
1	GENERAL PLAN
2	FOUNDATION PLAN
3	ABUTMENT LAYOUT
4	ABUTMENT DETAILS NO. 1
5	ABUTMENT DETAILS NO. 2
6	TYPICAL SECTION
7	GIRDER LAYOUT
8	STRUCTURE APPROACH TYPE R(30D)
9	STRUCTURE APPROACH TYPE N(30S)
10	STRUCTURE APPROACH DRAINAGE DETAIL
11	SLOPE PAVING
12	LOG OF TEST BORINGS 1 OF 5
13	LOG OF TEST BORINGS 2 OF 5
14	LOG OF TEST BORINGS 3 OF 5
15	LOG OF TEST BOTINGS 4 OF 5
16	LOG OF TEST BOTINGS 5 OF 5

STANDARD PLANS DATED MAY, 2006

A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
A76A	CONCRETE BARRIER TYPE 60
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B0-5	BRIDGE DETAILS
B0-13	BRIDGE DETAILS
B2-3	16"AND 24" CAST-IN-DRILLED-HOLE CONCRETE PILE
RSP B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
B7-1	BOX GIRDER DETAILS
B8-5	CAST-IN-PLACE PRESTRESSED GIRDER DETAILS

Standard Plan Sheet. No.
Detail No.

1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**

Jeff Sims, DESIGN ENGINEER	DESIGN	BY Timothy Schmalz	CHECKED Danny LaLonde	LRFD	LIVE LOADING: HL93 & PERMIT DESIGN VEHICLE	
	DETAILS	BY Mike Herron	CHECKED Danny LaLonde	LAYOUT	BY John O'Mara	CHECKED Danny LaLonde
	QUANTITIES	BY April Pearson	CHECKED Yiwan Huang	SPECIFICATIONS	BY James Choi	PLANS AND SPECS COMPARED James Choi

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0205
POST MILE M 8.67

WINTERS STREET UC (WIDEN)
GENERAL PLAN

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 3797U1

DISREGARD PRINTS BEARING EARLIER REVISION DATES
REVISION DATES: 02-23-06 12-20-06 03/23/08 05/13/08 08/14/08 02/23/09 04/23/09 04/05/10

SHEET 1 OF 16

FILE => 24-0205-a-gp.add

USERNAME => trmikesl DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	968	1012

Eric Watson 4/12/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

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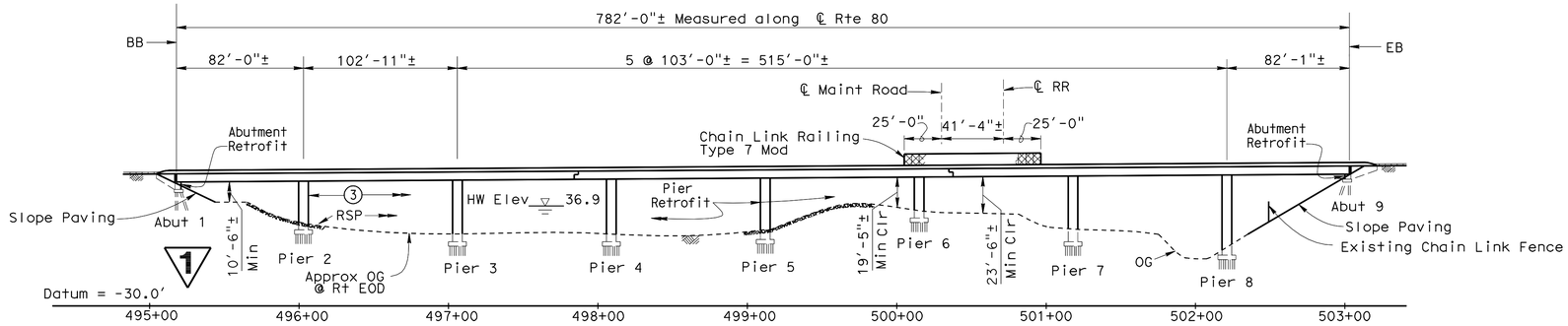
REGISTERED PROFESSIONAL ENGINEER — Eric Watson No. 64273 Exp. 6-30-11 CIVIL — STATE OF CALIFORNIA



ELEVATION

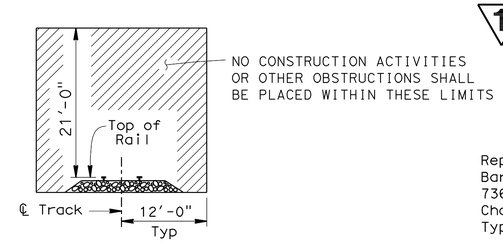
1" = 50'

Notes :

1. Paint "Natomas East Canal Bridge OH"
2. Paint "Br No. 24-0218"
3. Paint Pier No.
4. CIP Reinf Concrete Box Girder
5. Temporary Railing (Type K), see "Road Plans"
6. Remove Exist Interior Overhang and Barrier (Transverse Deck Reinf to remain)
7. Closure Pour
8. Concrete Barrier Type 60A

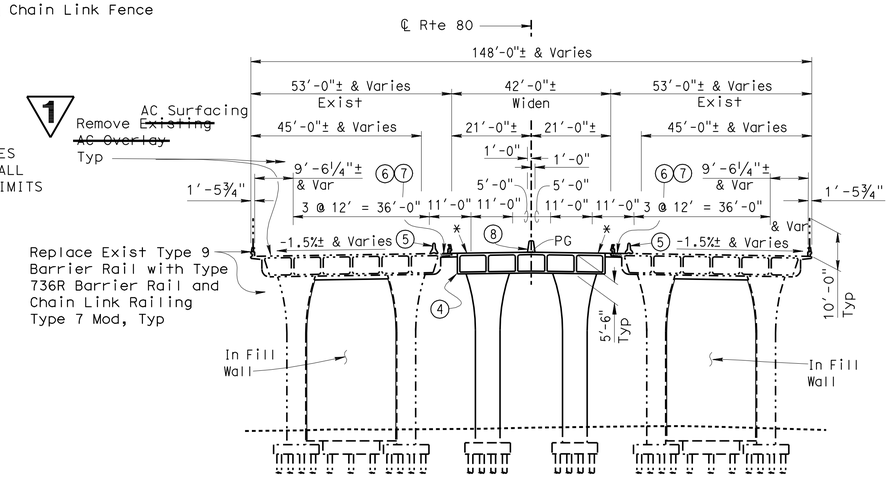
Legend :

- Indicates removal of Exist concrete
- Indicates Exist structure
- Match Exist grade and cross slope
- Indicates Electrolier on barrier, see "ROAD PLANS"
- Indicates Point of Min Vertical clearance



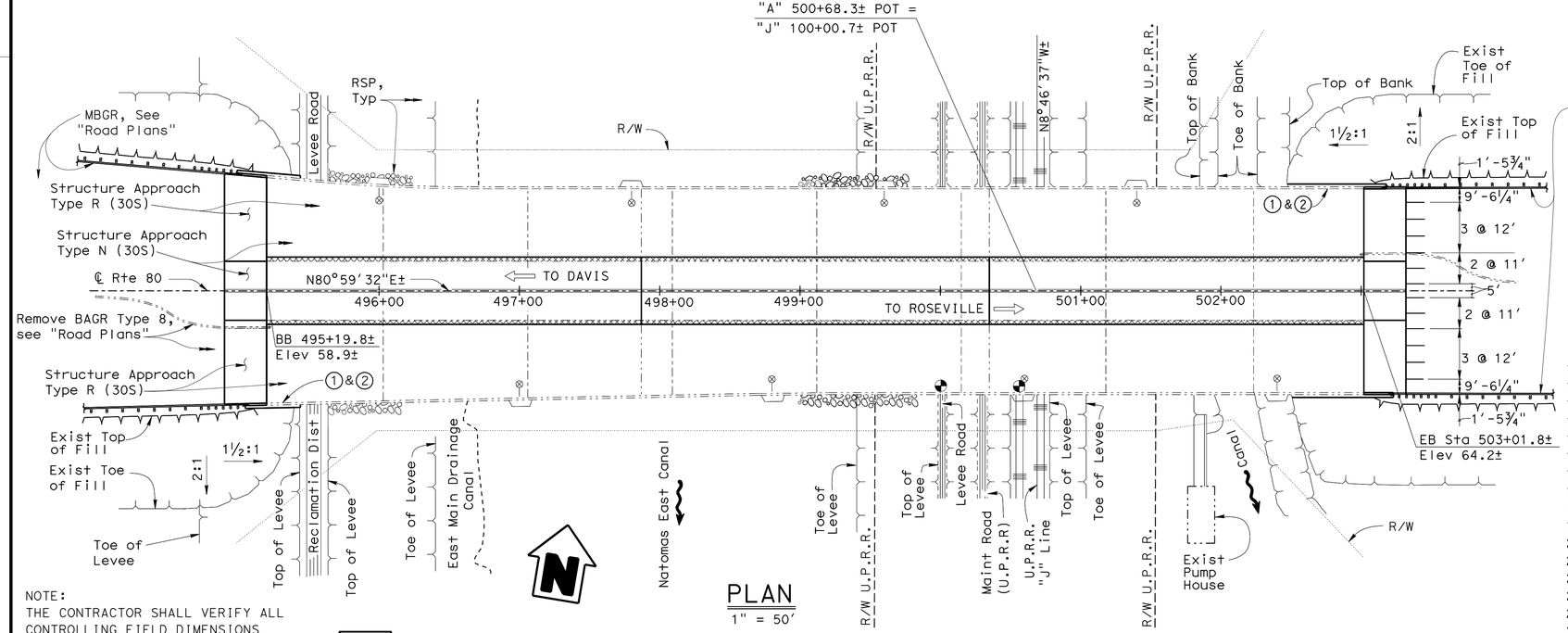
MINIMAL CONSTRUCTION CLEARANCE ENVELOPE

3/32" = 1'
(Normal to Railroad)



TYPICAL SECTION

1" = 20'



PLAN

1" = 50'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

INDEX TO PLANS

1. GENERAL PLAN
2. GENERAL NOTES
3. FOUNDATION PLAN NO. 1
4. FOUNDATION PLAN NO. 2
5. ABUTMENT LAYOUT & DETAILS
6. PIER LAYOUT & DETAILS
7. TYPICAL SECTION
8. GIRDER LAYOUT
9. HINGE DETAILS
10. GIRDER TOP REINFORCEMENT
11. GIRDER BOTTOM REINFORCEMENT
12. PTFE/ELASTOMERIC BEARING DETAILS
13. STRUCTURE APPROACH TYPE N(30S)
14. STRUCTURE APPROACH TYPE R(30S)
15. RESTRAINER DETAILS
16. SLOPE PAVING - FULL SLOPE
17. CHAIN LINK RAILING TYPE 7 MODIFIED
18. ROCK SLOPE PROTECTION DETAILS
19. MISCELLANEOUS RETROFIT DETAILS
20. LOG OF TEST BORING 1 OF 7
21. LOG OF TEST BORING 2 OF 7
22. LOG OF TEST BORING 3 OF 7
23. LOG OF TEST BORING 4 OF 7
24. LOG OF TEST BORING 5 OF 7
25. LOG OF TEST BORING 6 OF 7
26. LOG OF TEST BORING 7 OF 7

STANDARD PLANS DATED MAY 2006

A10A	ACRONYMS AND ABBREVIATIONS
A10B	ACRONYMS AND ABBREVIATIONS
A62B	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE SURCHARGE AND WALL
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
A76A	CONCRETE BARRIER TYPE 60
B0-3	BRIDGE DETAILS
B0-5	BRIDGE DETAILS
B0-13	BRIDGE DETAILS
B2-5	PILE DETAILS CLASS 90 AND CLASS 140
B3-8	RETAINING WALL DETAILS No. 1
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
B7-1	BOX GIRDER DETAILS
B7-5	DECK DRAINS
B7-10	UTILITY OPENING BOX GIRDER
B7-11	UTILITY DETAILS
B14-5	WATER SUPPLY LINE (DETAILS) (PIPE SIZES LESS THAN 4")

Standard Plan Sheet No.
Detail No.

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

DESIGN	BY Greg Thornton	CHECKED Vadim Shostak	LRFD	LIVE LOADING: HL93 w/"LOW BOY"; PERMIT DESIGN VEHICLE	
DETAILS	BY Bob Huddleston	CHECKED Vadim Shostak	LAYOUT	BY Greg Thornton	CHECKED Vadim Shostak
QUANTITIES	BY Eric Watson	CHECKED Jie Tang	SPECIFICATIONS	BY James Choi	PLANS AND SPECS COMPARED James Choi

Jeff Sims
DESIGN ENGINEER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0218
POST MILE 5.21

NATOMAS EAST CANAL BOH (WIDEN)
GENERAL PLAN

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 7-21-06 04/12/10 5/16/10 02/17/11 12/16/08 01/21/09 04/24/09 04/28/09 03/30/10

SHEET 1 OF 26

FILE => 24-0218-a-gp01.add

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	969	1012

Eric Watson 4/12/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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Pile Data Table

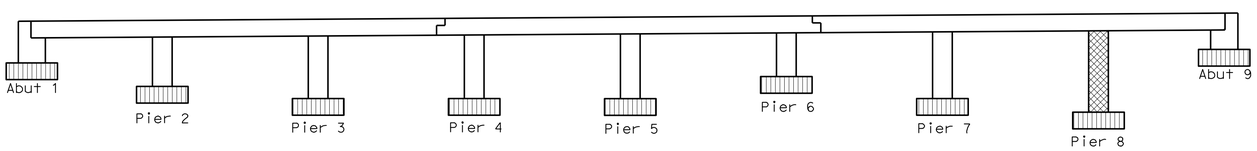
Location	Pile Type	Design Load (Kips)	Nominal Resistance Compression (Kips)	Nominal Resistance Tension (Kips)	Design Pile Tip Elevation (ft)	Specifical Pile Tip Elevation (ft)	Nominal Driving Resistance (Kips)
Bridge Widening							
Abut 1	HP 10X57	140	280	0	-14.0 (1)	-14.0	280
Pier 2	HP 10X57	140	280	0	-47.0(1)(2)	-47.0	280
Pier 3	HP 10X57	140	280	0	-54.5 (1)(2)	-54.5	280
Pier 4	HP 10X57	140	280	0	-54.5(1)(2)	-54.5	280
Pier 5	HP 10X57	140	280	0	-52.5(1)(2)	-52.5	280
Pier 6	HP 10X57	140	280	0	-34.0(1)	-34.0	280
Pier 7	HP 10X57	140	280	0	-50.0(1)	-50.0	280
Pier 8	HP 10X57	140	280	0	-61.0(1)	-61.0	280
Abut 9	HP 10X57	140	280	0	-8.0(1)	-8.0	280
In-Fill Walls							
Pier 2	PP14 X 0.250 ALT "V" (Close - Ended)	90	180	0	-9.5 (1)(2)	-9.5	180
Pier 3	PP14 X 0.250 ALT "V" (Close - Ended)	90	180	0	-20.5 (1)(2)	-20.5	180
Pier 4	PP14 X 0.250 ALT "V" (Close - Ended)	90	180	0	-21.0 (1)(2)	-21.0	180
Pier 5	PP14 X 0.250 ALT "V" (Close - Ended)	90	180	0	-19.0 (1)(2)	-19.0	180
Pier 6	PP14 X 0.250 ALT "V" (Close - Ended)	90	180	0	-0.5 (1)(2)	-0.5	180
Pier 7	PP14 X 0.250 ALT "V" (Close - Ended)	90	180	0	-16.5(1)(2)	-16.5	180
Pier 8	PP14 X 0.250 ALT "V" (Close - Ended)	90	180	0	-28.5(1)(2)	-28.5	180

Note: Design Pile Tip Elevation is controlled by the following demands:

(1) Compression.

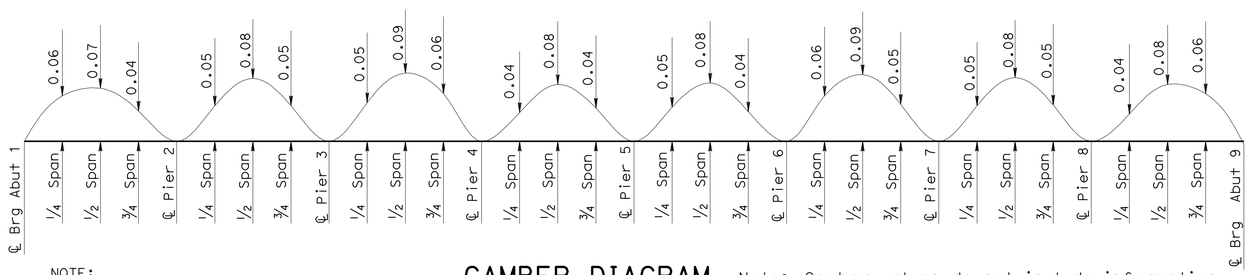
(2) Scour Potential exists to an approximate elevation of 5.0 ft at Pier 2 and an approximate elevation of 0.0 ft at Piers 3, 4 and 5.

\- Bottom of predrilled hole elevation at Piers 2 & 5 is 0.0 ft for both bridge widening and infill walls.



CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE



NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

CAMBER DIAGRAM

NO SCALE

Note: Camber values do not include information on of formwork or falsework settlement.

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD Specifications, Third Edition With the 2006 Interim Revisions and Caltrans Amendments V 0.06.

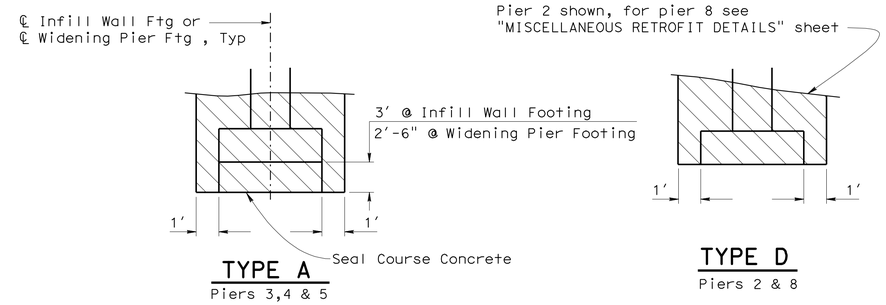
SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC), Version 1.4 June, 2006.

DEAD LOAD: Includes 35 psf for future wearing surface.

LIVE LOADING: HL-93 and permit design load.

SEISMIC LOADING: SDC ARS Curve For Soil Profile Type D (M=6.5±0.25) (Peak Rock Acceleration = 0.2g).

REINFORCED CONCRETE: f_y = 60 ksi
f'_c = 3.6 ksi, n = 8
f'_c = 6.0 ksi, n = 6



TYPE A
Piers 3,4 & 5

TYPE D
Piers 2 & 8

LIMITS OF PAYMENT - EXCAVATION

NO SCALE

QUANTITIES

BRIDGE REMOVAL (PORTION), LOCATION E	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	635	CY
STRUCTURE EXCAVATION (TYPE A)	1,070	CY
STRUCTURE EXCAVATION (TYPE D)	374	CY
STRUCTURE BACKFILL (BRIDGE)	513	CY
AGGREGATE BASE (APPROACH SLAB)	25	CY
FURNISH STEEL PILING (HP 10 X 57)	7,987	LF
DRIVE STEEL PILE (HP 10 X 57)	132	EA
FURNISH PILING (CLASS 90)(ALTERNATIVE V)	1,176	LF
DRIVE PILE (CLASS 90)(ALTERNATIVE V)	42	EA
STRUCTURAL CONCRETE, BRIDGE FOOTING	261	CY
STRUCTURAL CONCRETE, BRIDGE	4,060	CY
STRUCTURAL CONCRETE, BRIDGE (CHANNEL)	14	CY
STRUCTURAL CONCRETE, SEAL SLAB	132	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	93	CY
STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	253	CY
DRILL AND BOND DOWEL	3,170	LF
PTFE BEARING	24	EA
JOINT SEAL (MR 1")	165	LF
JOINT SEAL (MR 1½")	294	LF
BONDED JOINT SEAL	147	LF
BAR REINFORCING STEEL (BRIDGE)	1,709,736	LB
HEADED BAR REINFORCEMENT	35,700	EA
ABUTMENT LUMBER BLOCKING	8	MFBM
ROCK SLOPE PROTECTION (NO. 1, METHOD B)	1,750	CY
ROCK SLOPE PROTECTION (NO. 3, METHOD B)	630	CY
SLOPE PAVING (CONCRETE)	169	CY
MISCELLANEOUS METAL (RESTRAINER - BAR TYPE)	3,214	LB
CHAIN LINK RAILING (TYPE 7 MODIFIED)	184	LF
CONCRETE BARRIER (TYPE 60A)	842	LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	1,684	LF
REMOVE ASPHALT CONCRETE SURFACING	80,100	SQFT
STRUCTURAL STEEL (BRIDGE)	2,675	LB

Legend :

- Structural Concrete, Bridge
- Structural Concrete, Bridge (f'_c = 6.0 ksi)
- Structural Concrete, Bridge Footing
- Structure Excavation (Type A & D), (Including Infill Walls)

1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**

	BY	CHECKED
DESIGN	Greg Thornton	Vadim Shostak
DETAILS	Jinrong Zhou	Vadim Shostak
QUANTITIES	Eric Watson	Jie Tang

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0218
POST MILE 5.21

NATOMAS EAST CANAL BOH (WIDEN)
GENERAL NOTES

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 06/18/07 04/28/09 03/30/10 04/12/10 6/21/10 3-10-11 12/08/08 12/08/08 01/15/09

SHEET 2 OF 26

FILE => 24-0218-b-gnote.add

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:27

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	971	1012

Eric Watson 4/12/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — Eric Watson — No. 64273 — Exp. 6-30-11 — CIVIL — STATE OF CALIFORNIA

Bridge Location (Br: #24-0218L)
③ -72.87 Lt. ℄ "A" Line, Sta.503+02.98, Elev.=64.26 ±
④ -21.89 Lt. ℄ "A" Line, Sta.503+02.97, Elev.=64.07 ±

Bridge Location (Br: #24-0218R)
⑦ -22.05 Rt. ℄ "A" Line, Sta.503+03.15, Elev.=63.61 ±
⑧ -72.98 Rt. ℄ "A" Line, Sta.503+02.81, Elev.=62.95 ±

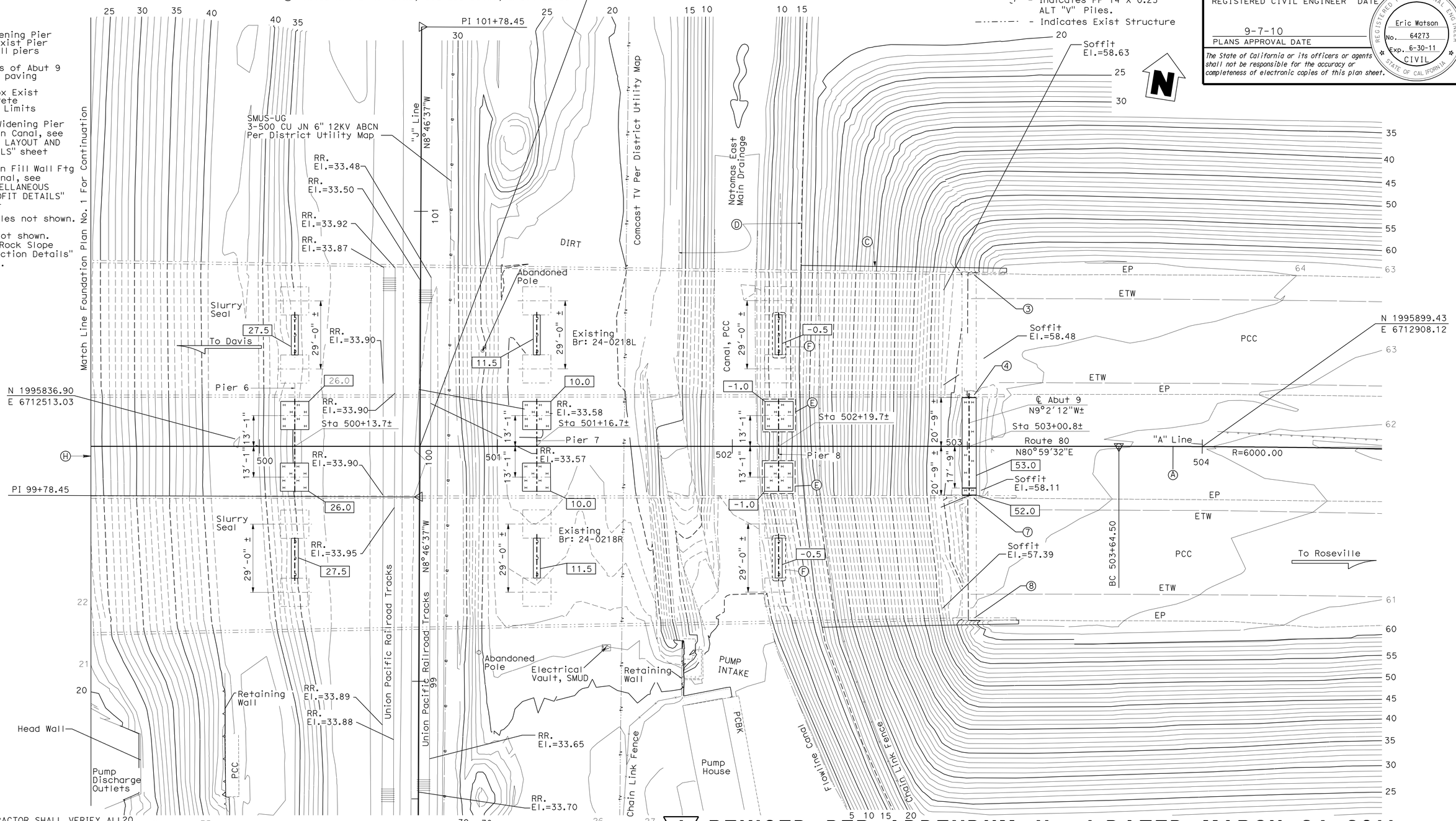
"A" Line Sta.500+67.05=
"J" Line Sta.100+0.00

CURVE DATA

No.	R	Δ	T	L
Ⓐ	6000.00	11°0'44"	578.38	1153.19

Legend:
- xx.x - Indicates Bot of Ftg.
- I - Indicates "HP" Pile.
- ◯ - Indicates PP 14 X 0.25 ALT "V" Piles.
- —·—·— - Indicates Exist Structure

Notes:
- Ⓑ ℄ Widening Pier = ℄ Exist Pier for all piers
- Ⓒ Limits of Abut 9 slope paving
- Ⓓ Approx Exist Concrete Canal Limits
- Ⓔ For Widening Pier Ftg in Canal, see "PIER LAYOUT AND DETAILS" sheet
- Ⓕ For In Fill Wall Ftg in Canal, see "MISCELLANEOUS RETROFIT DETAILS" sheet
- Ⓖ All piles not shown.
- Ⓗ RSP not shown. See "Rock Slope Protection Details" sheet.



NOTE:
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1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**

PRELIMINARY INVESTIGATION SECTION

SCALE	VERT.DATUM NGVD29	PHOTOGRAMMETRY AS OF: X			
1"=20'	HORZ.DATUM NAD83 (1991.35)	SURVEYED	BY DISTRICT/T. MASON	CHECKED	BY L. LEW 05/2007
ALIGNMENT TIES DISTR.TRAVERSE SHEET		DRAFTED	BY Y. ZHANG 05/2007	CHECKED	BY T.ZOLNIKOVA 05/2007

STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 10/25/05)

	BY	CHECKED
DESIGN	Greg Thornton	Vadim Shostak
DETAILS	Jinrong Zhou	Vadim Shostak
QUANTITIES	Eric Watson	Jie Tang

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

CU 03
EA 379701

BRIDGE NO. 24-0218
POST MILE 5.21

NATOMAS EAST CANAL BOH (WIDEN)
FOUNDATION PLAN NO. 2

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 6/21/2007 06/06/08 10/15/08 12/05/08 12/16/08 01/16/09 04/12/10 6/8/10

SHEET 4 OF 26

FILE => 24-0218-e-fp102.add

USERNAME => trmikesl DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:27

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	975	1012

Eric Watson 4/12/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

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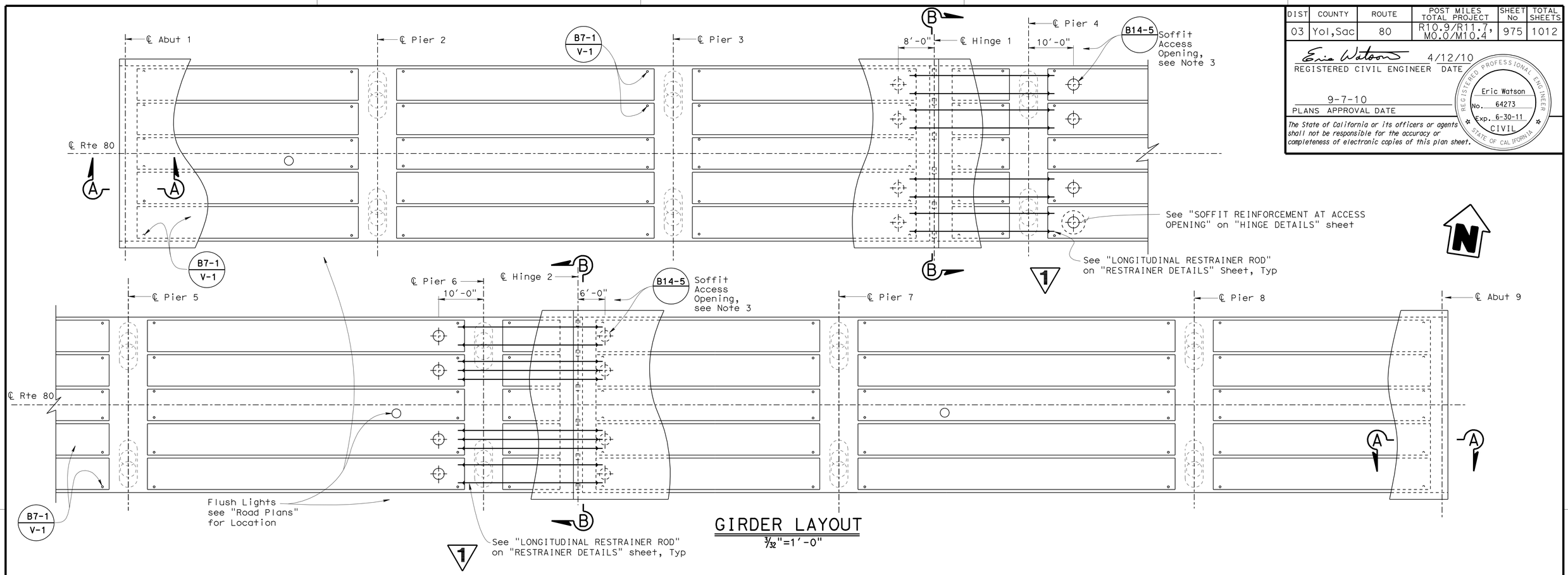
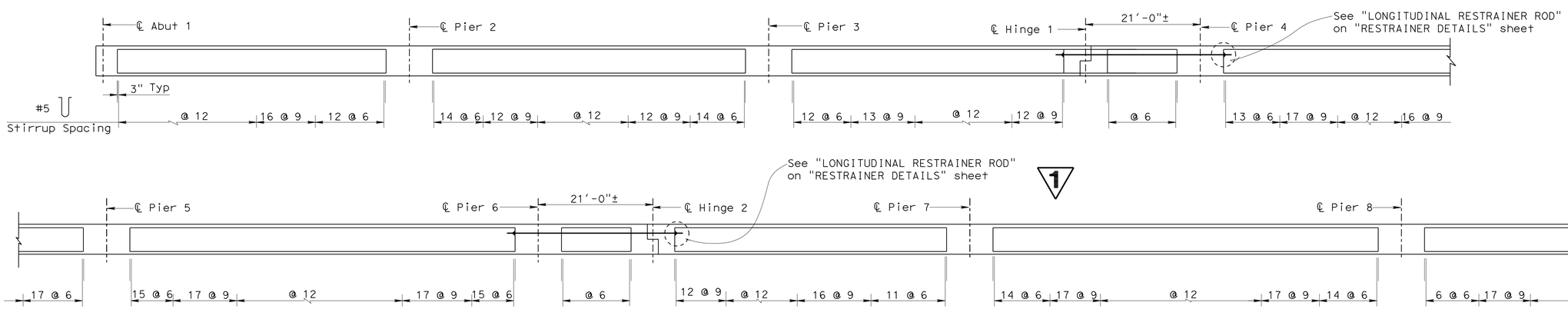


GIRDER LAYOUT
3/32"=1'-0"



LONGITUDINAL SECTION
3/32"=1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

Notes:

1. For section A-A, See "TYPICAL SECTION" sheet.
2. For section B-B , See "RESTRAINER DETAILS" sheet.
3. ℄ of Soffit Access Opening = ℄ of Bay, Typ

	BY	CHECKED
DESIGN	Greg Thornton	Vadim Shostak
DETAILS	Jinrong Zhou/Jie Tang	Vadim Shostak
QUANTITIES	Eric Watson	Jie Tang

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0218
POST MILE 5.21

NATOMAS EAST CANAL BOH (WIDEN)
GIRDER LAYOUT

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 06/13/07 | 04/12/10 | 02/17/11 | 10/28/08 | 12/09/08 | 12/08/08 | 12/18/08 | 01/28/09 | 04/27/09

SHEET 8 OF 26

FILE => 24-0218-1-g_1o01.dgn

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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	976	1012

Eric Watson 4/12/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

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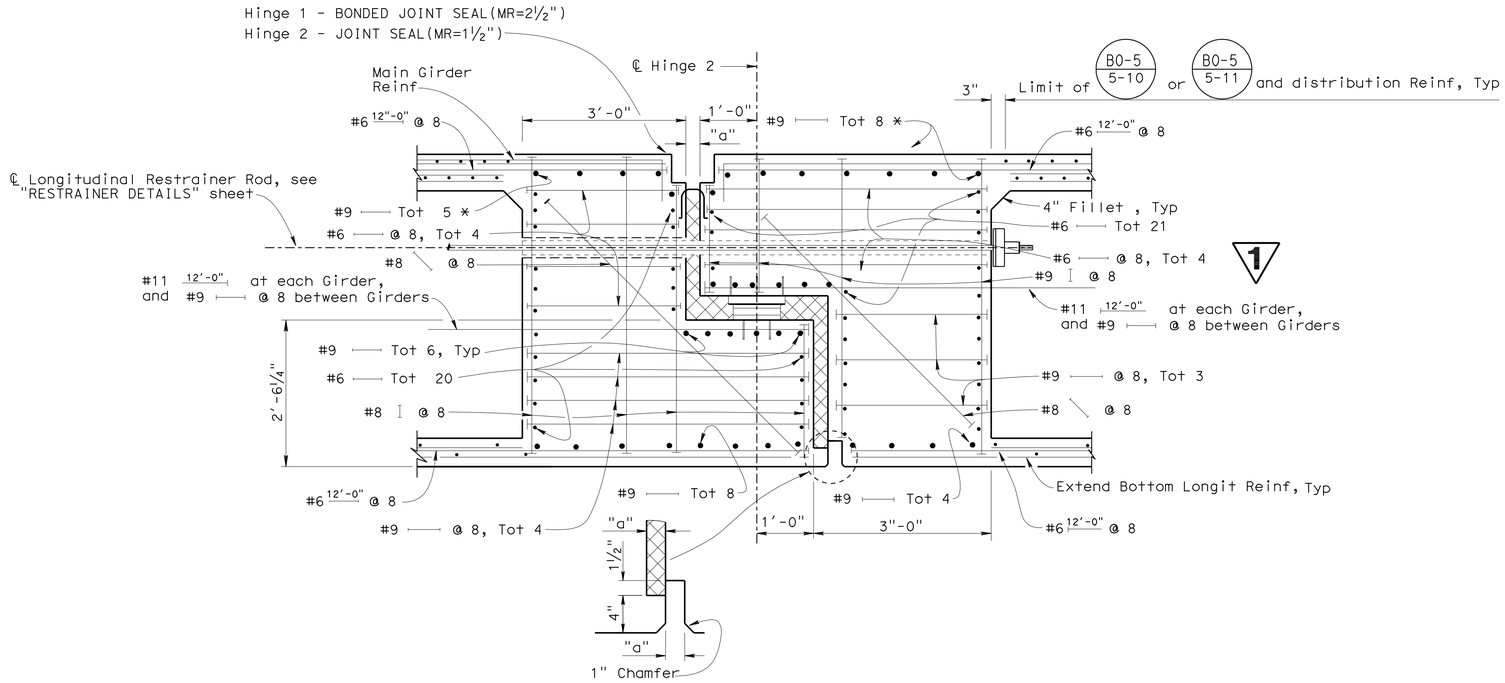
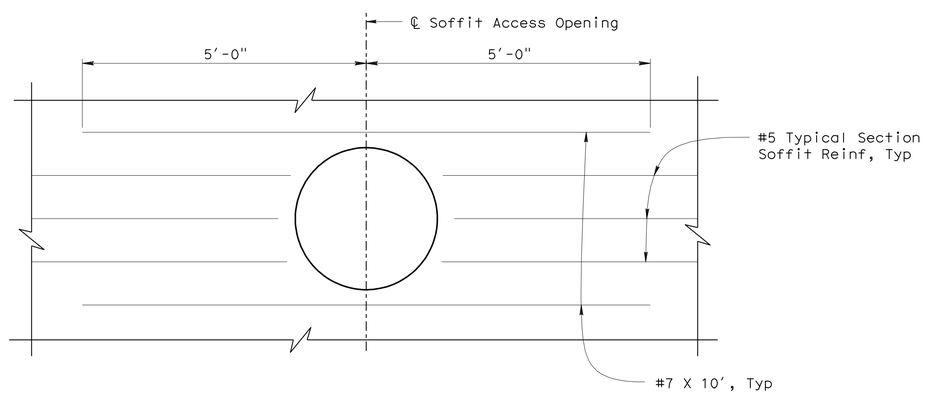
REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA



HINGE 2 (B6-21)
¾" = 1'-0"



SOFFIT REINFORCEMENT AT ACCESS OPENING
¾" = 1'-0"

Notes:

1. Hinge 2 shown, Hinge 1 similar.
2. Cover to head on bars to equal 2".
3. For PTFE Brg, see "PTFE/ELASTOMERIC BEARING DETAILS" sheet.
4. For location of "SOFFIT REINFORCEMENT AT ACCESS OPENING", see "GIRDER LAYOUT" sheet.

Legend:

* - Indicates reinforcement continues into overhang and closure

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

1 REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011

	BY	CHECKED
DESIGN	Greg Thornton	Vadim Shostak
DETAILS	Jie Tang	Vadim Shostak
QUANTITIES	Eric Watson	Jie Tang

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0218
POST MILE 5.21

NATOMAS EAST CANAL BOH (WIDEN)
HINGE DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 10-30-08 | 02-14-11 | 2-18-11 | 12-15-08 | 01-30-09 | 04-24-09 | 05-21-09 | 04-01-10 | 04-12-10

SHEET 9 OF 26

FILE => 24-0218-n-hngbdt01.dgn

USERNAME => trmikes1 DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:27

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
03	Yol,Sac	80	R10.9/R11.7, M0.0/M10.4	982	1012

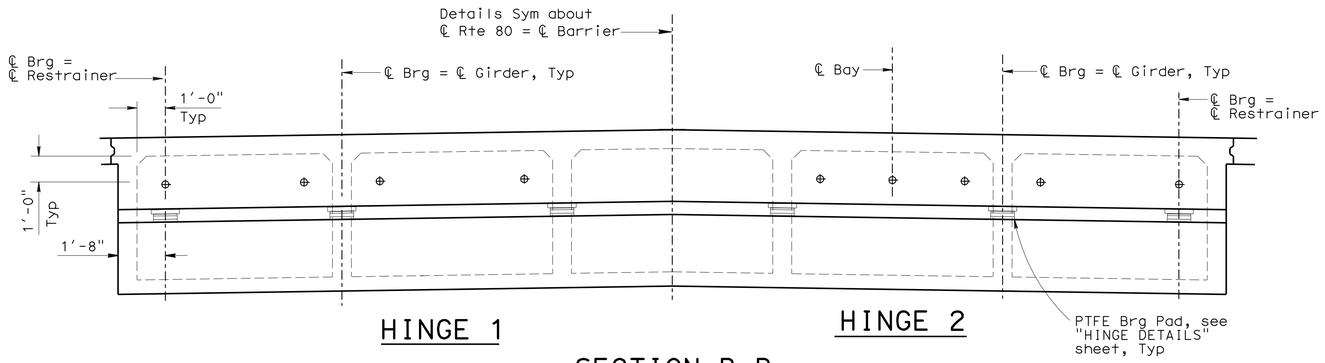
Eric Watson 4/12/10
REGISTERED CIVIL ENGINEER DATE

9-7-10
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

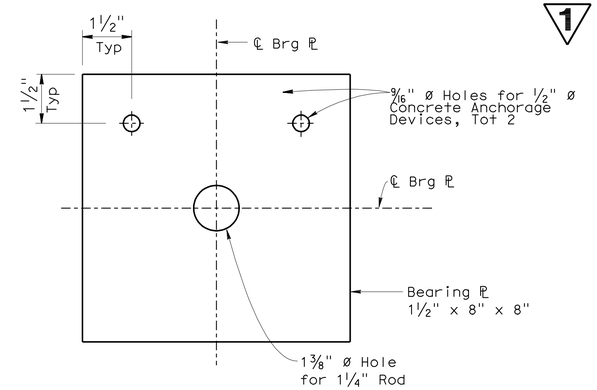
REGISTERED PROFESSIONAL ENGINEER Eric Watson No. 64273 Exp. 6-30-11 CIVIL STATE OF CALIFORNIA

1



SECTION B-B

3/8" = 1'-0"

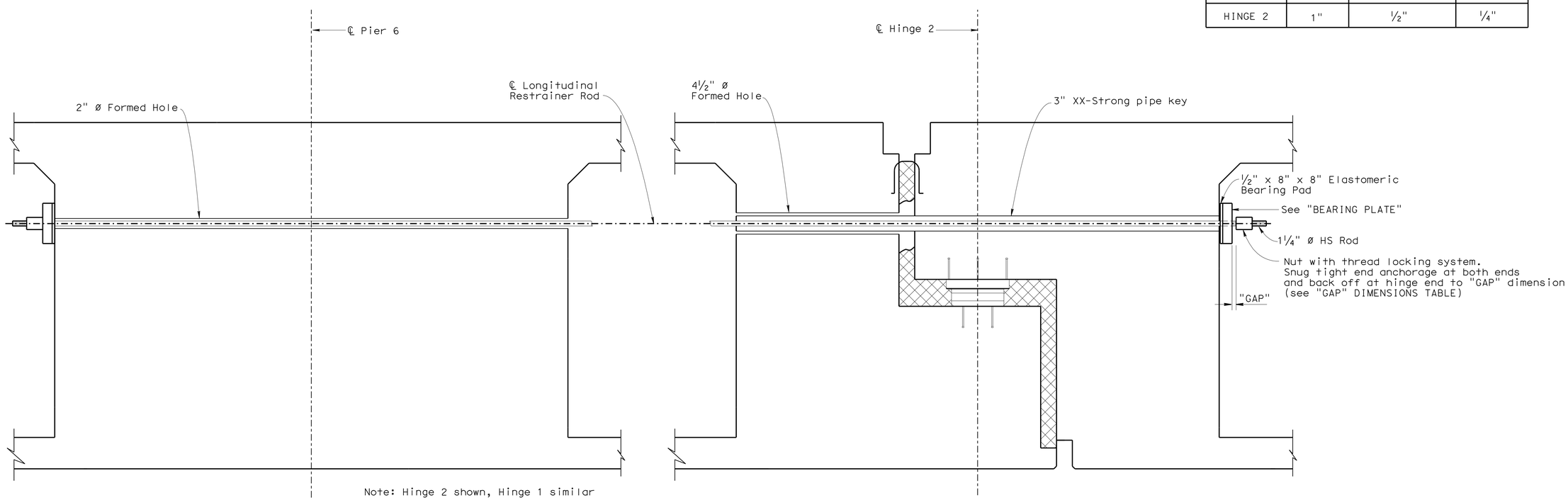


BEARING PLATE

NO SCALE

"GAP" DIMENSIONS

	SUMMER	FALL / SPRING	WINTER
HINGE 1	1¼"	¾"	¼"
HINGE 2	1"	½"	¼"



Note: Hinge 2 shown, Hinge 1 similar

LONGITUDINAL RESTRAINER ROD

NO SCALE

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

1 **REVISED PER ADDENDUM No. 1 DATED MARCH 24, 2011**

Notes:
1. Rods, hardware and bearing plates shall be galvanized.
2. Couplers with thread locking system may be used to splice rods.
3. For location of "SECTION B-B", see "GIRDER LAYOUT" sheet.
4. For details not shown, see "GIRDER LAYOUT" sheet.

⊕ - Indicates longitudinal restrainer rod with 3" XX-Strong Pipe Key

	BY	CHECKED
DESIGN	Greg Thornton	Vadim Shostak
DETAILS	Jinrong Zhou	Vadim Shostak
QUANTITIES	Eric Watson	Jie Tang

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 24-0218
POST MILE 5.21

NATOMAS EAST CANAL BOH (WIDEN)
RESTRAINER DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU 03
EA 379701

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES: 12/04/08 12/14/08 12/16/08 01/14/09 04/12/10 02/16/11 2-18-11

SHEET 15 OF 26

FILE => 24-0218-t-resunit.add

USERNAME => trmikest DATE PLOTTED => 23-MAR-2011 TIME PLOTTED => 11:27